CANADIAN GEOGRAPHICAL JOURNAL

THE CANADIAN GEOGRAPHICAL SOCIETY

OTTAWA, CANADA

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CANADIAN
GEOGRAPHICAL JOURNAL

This magazine is dedicated to the interpretation, in authentic and popular form, with extensive illustrations, of geography in its widest sense, first of Canada, then of the rest of the British Commonwealth and other parts of the world in which Canada has special interest.

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The British standard of spelling is adopted substantially as used by the Dominion Government and taught in most Canadian schools, the precise authority being the Oxford Dictionary as edited in 1936.

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The estuary of the Rivière Madeleine, looking northwest. The bar appears on the right. The village
is half a mile to the right.   Courtesy of H. V. Henderson

Town Patterns
on the Gulf of Saint Lawrence

By GRIFFITH TAYLOR

PART I
SETTLEMENTS NORTH OF THE GULF

A. *The Purpose of Urban Geography*

One of the most obvious changes in our
way of life in Canada in the last forty years
has been the shift from the country to the
town. Urban life has largely replaced rural
life, as may be seen from the following table,
where the percentage change is given.

	1901	1911	1921	1931	1941
Urban....	37.5	45.4	49.5	53.7	54.3
Rural....	62.5	54.6	50.5	46.3	45.7

The urban proportion is nearly the same
as it is in the United States, where it
amounted to 56.5 in 1940. In Australia,
which is usually assumed to have a large
pioneer population, the percentage living
in towns is 63.8, while in England the figures
are around 78 and 22 per cent respectively.

Hence it is obvious that the phenomenon is
widespread, and a study of this change in
Canada will become of increasing import-
ance.

There is another aspect of the subject of
interest, and it has to do with town evolu-
tion. This is a topic which has interested me
ever since I had a professional interest in
the birth of Canberra (the capital of
Australia) around 1910. How do cities grow ?
How much is due to man alone, and how
much determined by the environment ?
Can we reconstruct the general evolution of
a Canadian town by discovering samples in
all stages of growth in a given region ? I had
some such object in view in making the
preliminary survey of some of the oldest
settlements in Canada. There is another
point, which is hardly touched upon in this
article:—How does a French town differ from
an English one ? It will be an interesting
study for a later date.

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The village of Percé—Percé Rock and Bonaventure Island, viewed from Rosy Peak. Note the
scattered houses and the absence of gardens.   Courtesy of H. V. Henderson

In the summer of 1941 I made a journey
through British Columbia to learn some-
thing of the settlement patterns in that part
of Canada, and, in 1942, I investigated the
provinces at the other end of the Dominion
with the same object in view. It is of interest
that with the exception of Prince Edward
Island, the country I visited still strikes one
as largely undeveloped. The settlements are
sporadic, and separated by large areas of
forest, which seem to have altered little
since the time of the first settlers. In the
present article I am only concerned with the
later part of my journey on that occasion,
which commenced at Tadoussac, and led me
through Quebec across the river to Gaspé and
Prince Edward Island.

B. *The Structure of the Region*

The answer to the question as to why
settlement in this early-settled portion of
Canada has progressed so slowly is to be
found in a consideration of the structure of
the region. Roughly speaking, *young plains
in lowlands* constitute the most satisfactory
topography for a flourishing agricultural
settlement, while one of the least promising
is an *elevated area of very ancient rock*. If we
apply these criteria to the region in question,
we find that a large part of it consists pre-
cisely of elevated and very ancient forma-
tions. In essence the area is part of a huge
geological 'basin', i.e., a series of saucers
one above the other, with the smallest
saucer in the centre. This basin extends
from Quebec to Halifax and Cape Breton.

The oldest saucer, underlying all the
others, is the great Canadian Shield, and this
is illustrated in Fig. 1 in the top left corner.
It is all over 1,000 feet, and rises to 3,000
feet behind Malbaie in Quebec. Reference
to the small inset map (Fig. 1) shows us that
all of this Shield, except the district around
the lake of St. John, is still almost without
population. The eastern rim of this oldest
saucer forms part of the eastern coast of
Nova Scotia (not shown in Fig. 1), but
rocks of much the same age form the north-
ern plateau of Cape Breton.

Lying upon the Shield is a large saucer
composed of early Palaeozoic rocks of
Silurian age for the most part. They have
been elevated to heights of 4,000 feet in the
Shickshock Mountains in Gaspé Peninsula.
(These mountains are an extension of the
Appalachian folds to the west.) Naturally
these elevated rocks are also almost devoid
of settlement (see the inset map), save where
roads or railways cross the peninsula in the
vicinity of Edmundston. Where the saucer is

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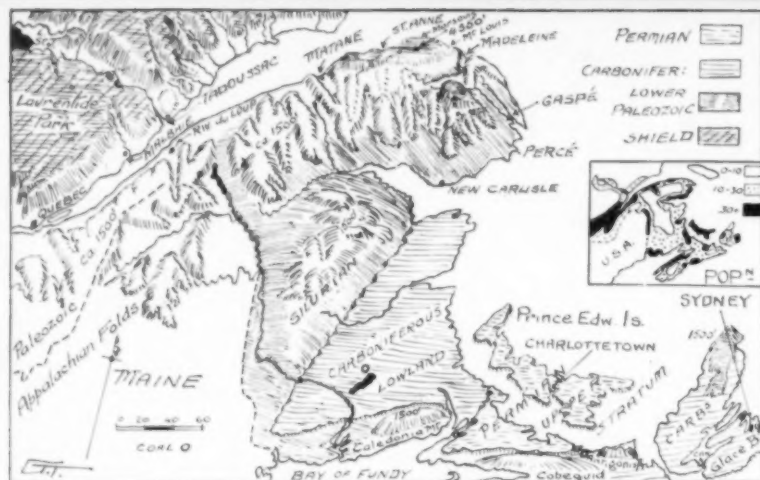
Fig. 1. A bird's-eye view of the region, emphasizing the highlands and the younger geological formations in the centre of the 'basin'. The formations are shown in their proper order in the legend. Inset is a simplified map of the density of population.

flatter, however, as in southern Gaspé and along the coasts, there are stretches of lowland where soils have accumulated, and here man is more in evidence. Fishing, of course, accounts in part for these villages along the coast.

The centre of the basin is occupied by the two later formations of the Carboniferous and Permian ages. Their edges are emphasized by scallops (or crenellations) in Fig. 1. These rocks were laid down about 200 million and 150 million years ago respectively. The former formation contains some valuable coal seams, which are indicated by the little circles near Sydney, Antigonish, and each side of Caledonia Mountain in Fig. 1. Much of this Carboniferous sandstone is quite sterile. The later Permian formations consist largely of a reddish sandstone, which is much more fertile than most of the other older rocks. It builds up the whole of Prince Edward Island, and also a large triangular patch on the adjacent mainland. Here prosperous farmlands are almost universal.

C. Site and Pattern of Tadoussac

At Tadoussac, Cartier dropped anchor as far back as 1535; but Chauvin seems to have made the first settlement about 1599, when he built a guard house so as to collect the furs from the Indians. It is believed that the name of the place refers to the mamelons of granite which are so characteristic a feature of the hinterland (Fig. 2). The composite diagram given in the illustration shows this famous French village, as viewed from the mouth of the deep Saguenay fiord. It is situated just where the Saguenay enters the Saint Lawrence, whose coasts extend to the northeast.

Although Tadoussac is the oldest town in Canada it has grown very little in the 340 years of its existence. Situated in a semi-circle of breast-shaped hills, it clusters along

Fig. 2. A sketch map of Tadoussac looking north across the mouth of the Saguenay. Photo 2 was taken from the view-point 'V' to the northwest of the inn.

Photo 1. The Indian Church at Tadoussac built in 1747. The modern stone church (1885) appears behind the earlier building.

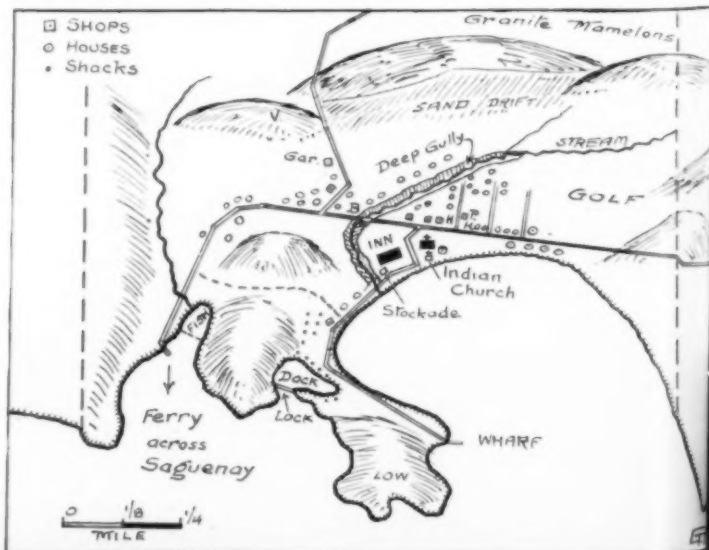one main road and has not yet needed or developed a complicated street plan. Let us alight at the wharf from the steamer and make a survey of the village. The wharf is on a low rocky point about half a mile from the centre of the town. We soon cross the low isthmus linking the low point to the higher land. Here a small land-locked cove has been converted into a dry dock by building a stone wall or lock across the narrow entrance. A small sailing vessel was in dock at the time of my visit.

Beyond the dock we pass a store and soon reach the grounds of the huge inn which is much the most imposing feature of Tadoussac to-day. About 1870 a company was formed to build a hotel, and in the words of the interesting little book by J. E. Roy, "thanks to judicious advertising tourists flocked there from all parts". Lord Dufferin built a summer home here, and of recent years the hotel has come under the control of the Canadian railways. Their large and comfortable steamers call here frequently on the voyage from Quebec to Bagotville up the Saguenay, and many passengers

stop over for a day or two at Tadoussac.

It must be confessed that there is very little to see dating back to the early days of French settlement. There is an interesting stockade and hut near the hotel, but, alas, it is a modern reproduction. Just across the road, however, is one of the oldest churches in the Dominion (Photo 1). It was built of cedar in 1747, and was in use till the new church was erected in 1884. The old wooden church is kept in good repair, and services are occasionally held there.

Just behind the church we reach the main road, built more or less parallel to the coast as usual. The main stores, the bank (B), and the post office are on this road. Here also are half a dozen pensions (one or two of brick), and some modest hotels which cater to the summer traffic. To the west the road curves down to the next little bay (Anse à l'Eau) where there is a fish hatchery. This was first established in 1875, and just alongside is a small wharf whence starts the ferry to cross the mouth of the Saguenay. Thus contact is made with the main road to Saint Siméon, Malbaie and Quebec. The

Photo 2. Panorama of Tadoussac looking to the southeast. The huge hotel (H), the wharf (W) and golf course (G), are indicated by initials. The ferry crosses the mouth of the Saguenay at the extreme right.

view seaward from the hill behind Tadoussac appears in Photo 2.

There is not much traffic beyond Tadoussac. A motor bus goes some sixty miles to the northeast to Laval Bay, passing through tiny villages about 15 miles apart. At Laval Bay the improved roads of Canada reach their eastern terminus. As the map suggests, this inland road passes close to a deep ravine cut behind the town, effectively preventing expansion to the north. Many small houses, including some pensions, occupy the grassy slope behind the main road. The town ends about a quarter of a mile to the east of the church. Here are some large summer cottages, shaded by trees and overhanging the steep cliff of the bay. A golf course occupies much of the slope at the head of the steep ravine already mentioned. Thus, to-day, there are less than a score of large buildings (including six stores) and perhaps twice that number of small houses in this settlement, founded by Chauvin in 1599, and continuously occupied ever since.

In his little book *In and Around Tadoussac* (Levis, 1891), J. E. Roy gives a census of the town about 1885. There were then about 590 people, belonging to 91 households. These folks were engaged as follows: 25 farmers, 15 navigators, 23 hunters, 3 merchants, 6 carpenters, 2 blacksmiths, 1 shoemaker, 2 masons, 4 carters, 1 baker, 1 miller, 1 pilot, 1 doctor, 1 magistrate, 1 postmaster and 1 Crown Land Agent.

To-day, I imagine the population is much less. I saw only an acre or two of oats, and there are few farms inland until the next village is reached, some 12 miles away. In spite of its early start and the importance which it possessed in the days of the fur trade, and to a lesser degree in the lumber period, the lack of good agricultural lands has prevented its growth. It is of interest that the entrance to the Saguenay remains free from ice through the winter, though the gulf to the east is not then navigable. It has often been used as a refuge for ships in the gulf; but there is no evidence that the sanguine predictions of some early writers, that Tadoussac will rival Montreal or Sydney as an Atlantic terminal, will ever come true.

In an address I gave to the American Geographers in 1941 (see *Annals*, March, 1942), I suggested a classification of towns according to their stage of evolution. Briefly the various stages are as follows:

CLASSIFICATION OF TOWNS

Sub-infantile	Only one street, no differentiation of shop or house sites.
Infantile	A street plan, but no differentiation of building areas.
Juvenile	Zones of houses and shops in different areas.
Adolescent	Scattered factories, no definite zone of better houses (Ha).
Early Mature	Residence zones fairly defined, no segregation of factories.
Mature	Four zones of houses, separate commercial and industrial areas.
Late Mature	Indications of advance to a modern town-planning system.
Senile	Large areas of town abandoned, remainder stagnant.

Photo 3. *The valley of the Malbaie River which has cut back into the Laurentian Shield to the northwest of the town of Malbaie (Murray Bay). The view is looking to the north.*
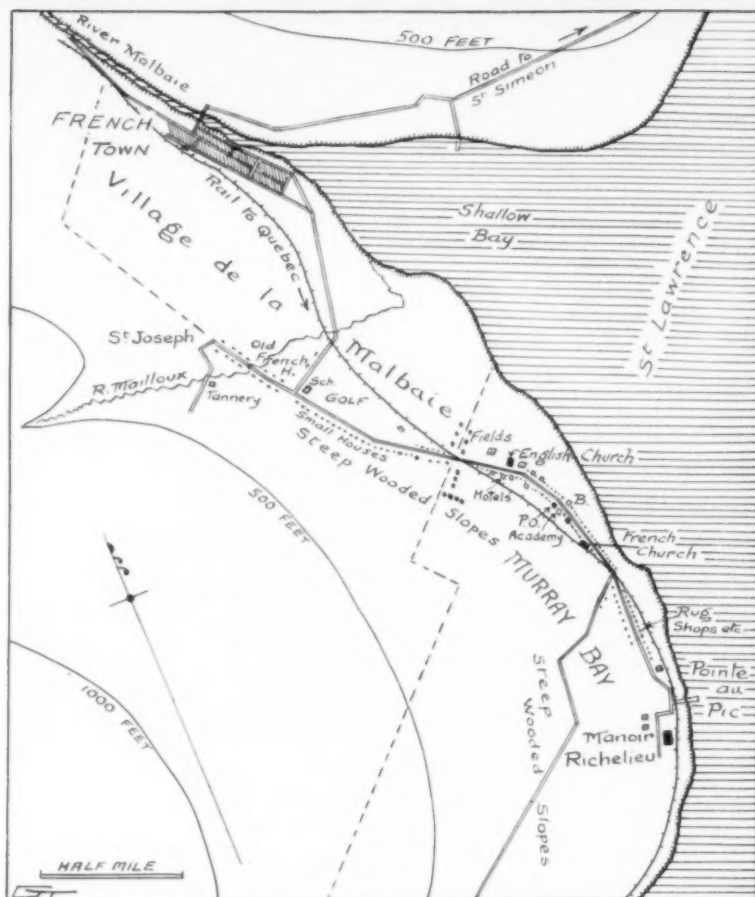
Fig. 3. Sketch map of Murray Bay and the vicinity, showing the straggling tourist village at the south, the primitive French village of St. Joseph in the centre, and the active French town of Malbaie in the north.

Adopting such a scheme, the condition of Tadoussac seems to place it among the *Infantile* samples.

D. *Site and Pattern of Murray Bay*

From Tadoussac the writer crossed the Saguenay by the steam ferry, and then took the autobus to Murray Bay. In this distance of 50 miles there is only one little town (St. Siméon), and two or three small villages. Much of the country is still forested for miles along the roads. At times we traversed broad longitudinal valleys separated from the coast by flattish hills of granite. Here the land is usually cleared and occupied by widely scattered farms. There is quite a large town, almost exclusively French, at the mouth of Malbaie (or Murray) River. This stream has cut a wide low valley in the Shield, which is illustrated in Photo 3. The valley naturally contains better soil than do the hills around, and it includes a number of farms. Some lumbering and mining is also carried on in the Malbaie valley.

The railway ends at Malbaie, but my chief interest was in the adjacent village of Pointe au Pic, or 'Murray Bay' as the English tourists call it. In 1762, General Murray, the Governor of Canada, divided the old Seigneury of Malbaie between two of his English officers. Nairne received the lands west of the Malbaie River, which was renamed the 'Murray', and Fraser the lands to the east. The old Manoir Richelieu (Fig. 3) was burnt down in 1928, but a huge gabled hotel rose in its place within a year. This is the chief point of interest at Murray Bay. It is managed by the Canadian National Railways, and is unique in its most interesting collection of hundreds of historic pictures and maps. These are displayed on the walls of the various halls and salons in the Manoir (Photo 4).

If we walk south from the French town of Malbaie, we soon cross a little stream and pass the old French house shown in Photo 5. Along the roadside is a continuous row of small French houses, which become most picturesque a little to the west. Here at St. Joseph an old tannery is placed on the steep banks of the Mailloux. After passing the golf course we reach Murray Bay proper. This is a continuous row of pensions and small shops for over a mile on each side of the main road. Near the English Church are some large gardens containing imposing residences, and these are duplicated at the south end of the village near the Manoir. The post

office, bank and a large academy are in the centre of the town. Here also is the station and the large French Church. Stone watering troughs and a notable number of horses and buggies show that we are in a more primitive community than much of Canada. The shops are largely devoted to the selling of rugs and local mementoes. There are six of these, and about the same number of food shops, as well as three other stores and a cinema.

The wooded slopes rise steeply to the west of the village, and here are the summer residences of the wealthy Canadian and American residents who come here for the fine scenery and the golf year after year. The coast is picturesque, but too rocky for bathing, though there are large swimming baths at the Manoir. Fishing in the hinterland, and freedom from the ragweed menace in the fall, are other attractions of this centre. A large 'luxury steamer' calls regularly at Pointe au Pic on the route from Quebec to Bagotville (in the middle Saguenay), calling en route at Tadoussac. The tourist village is nearly deserted in the winter; the pensions are mostly empty, their owners living in the smaller adjacent

houses. The artists are not in evidence in winter, and the region has not yet been exploited as a scene of winter sports. Murray Bay ranks with Tadoussac as *Infantile* in our classification.

E. *Site and Pattern of the City of Quebec*

Few cities in the world have a more commanding site than Quebec. It lies six hundred miles west of the entrance of the great Gulf of St. Lawrence, where the gulf rather suddenly narrows. Here the St. Lawrence can be bridged, though salt water extends 80 miles farther west to Lake St. Peter. At these narrows a most picturesque bluff faces the ocean. It is really the eastern end of a brick-shaped portion of the earth's crust (which geographers call a *horst*) which has been pushed up during mountain-building movements. This horst is about 300 feet above sea-level, two miles wide in the centre, and about 7 $\frac{1}{2}$ miles long. The eastern half of the horst can be made out in the lowest figure of the stage-diagram given in Fig. 4. The St. Lawrence valley has been a marked geographical feature possibly since Ordovician times, i.e., about 350 million years ago. It has been a long-lived depression, between the
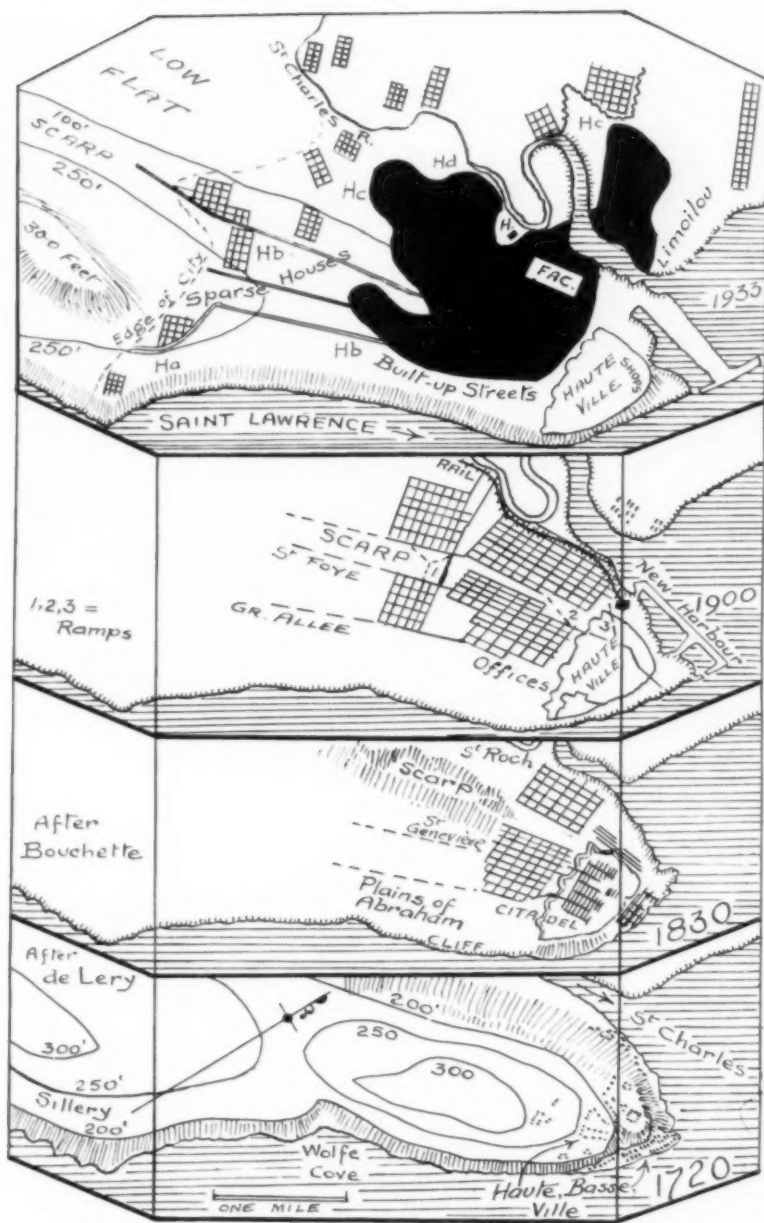
Fig. 4. *A stage-diagram showing the evolution of the city of Quebec from 1720, through 1830 and 1900, to 1933. The main features of the crustal block (horst) are shown in the lowest diagram. The later areas covered by built-up streets are shown in solid black.*

ancient Shield and the fold mountains, which time and again have surged upward along the site of the Appalachians. Between the two has been an area of lowland, less than 20 miles wide, in which younger deposits have at times been laid down, notably in the period since the ice age. This depression is bounded by cracks in the crust (called *faults*); and the St. Lawrence lowland is a sort of *graben* (i.e. a depressed block), just the antithesis of the horst which borders it on the north.

To the north of the Quebec horst is the broad valley of the St. Charles, and the estuary of this small river has of late years been converted into a deep-water port for the City of Quebec. The St. Lawrence is three-quarters of a mile wide at the Levis ferry, but is less than half a mile wide where the great bridge crosses the river five miles west of the city. The steep cliffs of the horst have been notched by little coves, and of these the most interesting is Wolfe's Cove, up which the British soldiers climbed just before the momentous battle of the Plains of Abraham on 13th September, 1759.

Cartier inaugurated the fur trade at Quebec in 1535, when he visited the Indian village of Stadacona. This seems to have been near the present railway station on the shores of the St. Charles. He spent two winters near Quebec, at St. Roch and Cap Rouge respectively; but no real French settlement started until about 1608, when Champlain built his house and stockade. This 'habitation' was erected under the cliffs of the present Citadel and was the first house in the 'Basse Ville'. In 1663, there were about 800 folk living in Quebec, almost wholly in the Basse Ville, but, within the next half-century, the houses had spread up the gap occupied by the Côte de la Montagne' to-day. Some of the fine stone buildings which make Quebec the most interesting historic town in North America date from about this time. Among them are the Ursuline Convent, the Hôtel Dieu and the Seminary.

By 1770, as the lowest map in the stage-diagram (Fig. 4) shows, the town had spread up to the plateau 200 feet above the Basse Ville; and indeed a few buildings were situated nearly a mile to the west, where the earlier fortifications had been built around the end of the century. De Léry erected the main French walls about 1720, but they were of little value in the vital struggle of 1759, since the British completely defeated the French about one mile to the west of the fortifications, and the latter were quickly yielded.

By this time many streets had been constructed such as the Rue de St. Pierre which skirted the cliffs in the Basse Ville. The Rue St. Louis led to the Plains of Abraham, where it became the Grande Allée, and ultimately reached Sillery and Cap Rouge. The other main street, the Rue St. Jean, passed through the walls of the Haute Ville, and became the Chemin St. Foye. This latter was built along the scarp which bounds the Haute Ville and the horst on the north side. Even to-day only three roads descend this scarp and enable vehicles to reach the low valley of the St. Charles to the north of the older part of the city. These steep 'ramp' roads are labelled 1, 2, 3 in the 1900 map.

About 1771, there were 356 families in the Basse Ville and 610 in the Haute Ville. Timber export became of great importance after the British conquest, and the new suburb of St. Roch, along the south shore of the St. Charles, was largely devoted to this industry. By 1830 this was well established, as a glance at the map of that date in the stage-diagram (Fig. 4) will indicate. The great walls of Quebec mainly date from 1820 or thereabouts, and were built by the British at a cost of about 35 million dollars. (Blanchard).
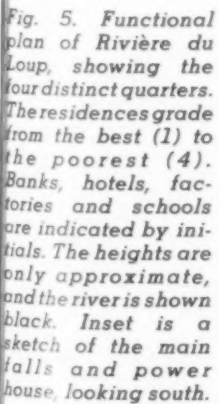
Shipbuilding was a great feature of the town's industry, especially in the decades preceding 1860. But about this time the development of steel vessels increased rapidly, and the wooden ships of Canada were in much less demand. However, the trade in grain and timber, and the growth of small factories (making shoes, etc.) to a large extent replaced this loss.

As Blanchard points out[*], by 1871 there were 42,000 folk out of a total of 59,700 in these new suburbs beyond the walls of the Haute Ville. A period of relative stagnation followed, from 1871 to 1901; but thereafter the population increased rather rapidly, and there are over 150,000 folk in the city to-day. The northern suburb of Limoilou started about 1905, and is largely inhabited by industrial workers.

The upper map in the stage-diagram shows (in black) the area covered by close-set houses. With considerable spaces, however, the city extends far to the west of this area. The more important clusters of streets are shown by small 'gridirons', but scattered houses with large gardens occupy much of the intervening region. In general we may say that to-day the merchants' quarter is in the Basse Ville, especially near the huge docks constructed mainly around 1890 and 1930. The largest shops are in the Haute Ville, especially in the Rue St. Jean. There are, however, many smaller shops along the whole course of this street, as it extends west and merges in the Rue St. Foye. The offices and legal sections are found mainly along the other main avenue of Haute Ville, the Rue St. Louis and its extension, the Grande Allée. In this part of the city (west of the walls) are most of the folk of English descent.

Quebec has been termed a city of churches, and the modern Catholic foundations are numerous and imposing. This is especially the case along the Rue St. Foye, where half a dozen huge convents, hospitals and allied institutions are to be seen in little over a mile. In the upper map in the stage-diagram (Fig. 4) I have indicated where the larger mansions (Ha) are numerous, surrounded, as usual, with attractive houses of the Hb class. Rows of apartments and semi-detached residences are a feature of the Grande Allée, especially about half a mile from the walls. The quarters of the poorer folk, almost exclusively French, are to be found in the lowlands near the St. Charles River, and in Limoilou.

It is interesting to compare the later history of the three earliest settlements in Eastern Canada, i.e., Tadoussac, Quebec and Montreal. The first had no hinterland, and never reached any size. The second was the great city of Canada until about 1850, when its rival Montreal began rapidly to forge ahead, and now has five times the population of Quebec. Quebec had the great advantage at first of being at the head of navigation. The narrowing of the river (the origin of the Indian word 'Quebec') made

[*] L'Est du Canada Français. Montreal, 1935, which all students of Canadian Geography should study.

Fig. 5. Functional plan of Rivière du Loup, showing the four distinct quarters. The residences grade from the best (1) to the poorest (4). Banks, hotels, factories and schools are indicated by initials. The heights are only approximate, and the river is shown black. Inset is a sketch of the main falls and power house, looking south.

the waters to the west unsuitable for sailing vessels. With the advent of railways, and with the deepening of the channel by canals, many of the advantages of Quebec were lost. This was especially the case when steel ships, propelled by steam, replaced the sailing ships of early days. Moreover, the Lake Champlain route from the south was more important than any leading directly to Quebec. To-day, Quebec is emphatically the French centre in Canada, since the proportion of English-speakers is insignificant; and it is industrially much more important than it was a few decades ago. As a centre of tourism it has hardly a rival on the continent. On the classification used in this paper Quebec ranks as a *Mature* city.

PART II
SETTLEMENTS SOUTH OF THE GULF

F. *The Site and Pattern of Rivière du Loup*

This picturesque town is placed near the falls on the Rivière du Loup, about 120 miles to the east of Quebec (Fig. 5). It has a different pattern from any of the others dealt within this study, since it is strung along the sides of a definite gorge a mile or two inland from the coast of the gulf. Here the river descends from a broad inland shelf, about 400 feet above sea-level, by several falls of which the largest is sketched in the inset in Fig. 5. Thence it passes along a short gorge to its estuary on the gulf. Here a small port has developed, from which steam ferries ply regularly to the opposite shore at St. Siméon and Tadoussac about 20 miles away.

The history of the town has been written by M. Cimon, and from his account the following facts are taken. The name probably refers to a ship which wintered here in the early days rather than to the prevalence of land wolves or sea-wolves (*loup-marins*, i.e. seals). Sieur Chesnaye received the first grant in 1673, and a mission was placed here about 1683. After the conquest it came into the hands of the Governor, James Murray, and, in 1802, was owned by Alexander Fraser of the same family which occupied Murray Bay across the gulf. These Frasers were descendants of one of Wolfe's Highlanders. The name was changed to Fraserville in 1850, but the old French name is used exclusively to-day.

In 1765, there were 15 houses in the village with a population of 68 people. The first chapel was built in 1792, and the second in 1810. For many years somewhat of a controversy raged as to the position of the first large church, whether it was to be built near the ancient chapel, or closer to the village which had developed near the river and the early trade centres. Finally the 'villagers' won, and the fine church of St. Patrice crowned their efforts (Fig. 5). Since that time the French population has grown so greatly, and the various parishes are so strung out along the river gorge, that two later churches of imposing appearance crown the two hills to the southeast and southwest of the town. These are also represented in Photo 6, and the three illustrate the character of the French architecture as well as the devotion of the parishioners.

Photo 6. *The three large French parish churches at Rivière du Loup*

From the official *Souvenir* of Rivière du Loup

In 1859, the Grand Trunk Railway reached the town, and ever since it has been an important railway 'division', with large workshops for repairing rolling stock just above the falls. It is also the headquarters of the small Temiscouata Railway to Edmundston. In 1881, the citizens numbered 3,566, and to-day they have increased to some 8,500. In 1881, a company was formed to utilize the power of the falls (shown in the inset, Fig. 5). At first used to produce pulp, the power is now devoted to the needs of the town and adjacent factories. The power can be greatly increased when a further supply is needed. There are three smaller falls, and these in part supply a furniture factory, a pulp-mill, a foundry and the railway machine shops.

A good view of the present town can be obtained from the southern plateau near the church of St. Francis (Fig. 5). Immediately to the east is the fairly mature valley of the upper river along which runs the railway. The station is just below, and is reached by a steep street flanked by some small shops. In the broad valley somewhat to the southeast of the station is a large group of machine shops (F, F, in the map). Across the valley is another flat-topped hill, crowned with the church of St. Ludger. Here another parish has developed, like that of St. Francis, for the most part composed of small third-class houses (labelled 3 in the map).

The main street of the town runs parallel to the river, well above its west bank. Here are the chief shops and two of the banks. To the west of Lafontaine Street the land descends a little to fields, bordered for the most part by fourth-class houses (4 in the map). Just above the main bend in the river are the main falls, where the river drops about 60 feet over a nearly vertical cliff of Cambrian shales and sandstones. Near the carshops it is of interest that beds of marine shells have been found at a height of 340 feet above sea-level. This is perhaps the highest occurrence of such shells east of Quebec, and shows the amount of the submergence during the Pleistocene (Goldthwait).

The factories mentioned earlier have been erected below the falls (at F in the map); and the large brick Hotel de Ville (TH) crowns the cliffs just at the main bend of the gorge. To the north of this building is the parish of St. Patrice with the oldest of the three French churches, and with a small English church a little to the northeast. Here is another cluster of shops, and most of the official buildings (such as the Palais de Justice and the hospital) and several banks and shops. Two large hotels are placed at the foot of the hill, where the main cross-road, named after Fraser, runs along the edge of the coastal plain.

Rivière du Loup is situated in the midst of a rather wide area of favourable farming country, and there is still a good deal of lumbering in the vicinity. With its water power and its position on a railway junction, it has naturally attracted the attention of manufacturers, as already noted. Its pattern is rather unusual, since it consists of four units strung out along the river gorge.

The railway station was built some distance to the south of the early centre of the town, no doubt with a view to crossing the gorge easily. The industries have been placed on the cheaper lowland near the river, and these have led to the development of the workers' houses nearby. It is one of the features of hydro-electric power that factory sites can be chosen well away from the actual falls. In the days of crude water-wheels the mill had to be fairly close to the actual fall, whereas to-day the power cables of even a small station can supply power anywhere within several miles. Thus the somewhat conflicting elements in the growth of the town have produced four centres on different levels, a pattern which is paralleled by a similar 'falls town' at Shawinigan (100 miles west of Quebec). These four units are the three parishes with their large churches, and the fourth unit including the main shops and the power station which links the others. Rivière du Loup has a fairly defined zone of factories and a rather ill-defined series of houses and shop zones. It may be placed in the *Adolescent* class.
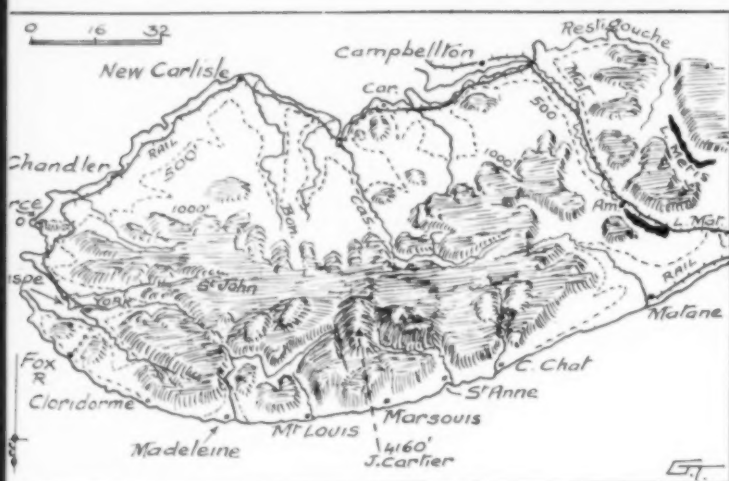
Fig. 6. A block diagram of the peninsula of Gaspé, looking southward from the Gulf of St. Lawrence. The 500 and 1,000 feet contours are indicated.

G. *Towns and Villages on the Coast of Gaspé*

I have drawn a special block diagram of the peninsula of Gaspé to show the structure of this very interesting section of the Dominion. In Fig. 6 we are supposed to be looking to the south, directly at the most picturesque part of the region. The plateau-like character of the northern part is well brought out. The highest points near Mt. Cartier (4,160 feet) are formed of hard igneous rocks which have resisted erosion a little more than have the ancient Palaeozoic rocks which build up most of the Shick-shocks. It will be noticed that the divide is much nearer the northern shore than the southern, hence there are steep slopes on the northern shores and much gentler slopes on the southern shores.

In two places, i.e., near Marsouis and Cloridorme (Fig. 6) the plateau almost overhangs the sea. Here, clearly there is no room for agricultural development, and the scenery is correspondingly wilder. Indeed, just east of Marsouis, cliffs of a height of a thousand feet are washed by the sea (Photo 10). In general this height is not reached within a distance of one mile of the sea, and in some places (notably at the mouths of the main rivers) there is a much greater margin of low land. For instance, at St. Anne and Madeleine the thousand-foot contour has

receded about four miles from the sea. Here, and at Mont Louis and Cap Chat for somewhat similar reasons, there is a greater development of farm lands.

The ancient French method of subdividing the land is still in evidence along this coast. A zone of about a mile and a quarter wide is marked off parallel to the coast. This is divided into extremely narrow strips, about 150 feet wide, running at right angles to the coast, and to the main road of the region. Usually the southern ends of these strips reach up toward the plateau, and are of very little use for anything but wood-lots. All crops must be grown at the northern end of a strip.

The little town of Matane at the end of the local railway illustrates many of the features of a Gaspé settlement (Fig. 7). It is situated

Fig. 7. A diagram of the topography in the vicinity of Matane looking to the east, and showing a conspicuous terrace.
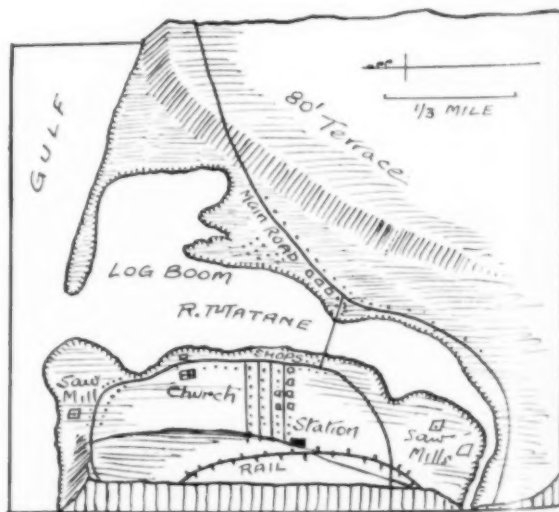
Photo 7. The broad low valley at Matane, looking to the southeast. The large church is at the left centre, and a sawmill at the right.

at the mouth of a river of the same name, which has cut a broad valley in the ancient rocks of the region. The estuary has been drowned by the rise of waters, since the melting of the Ice Cap. But there have been upward joggles of the crust, due to the removal of the weight of the ice, and the gradual approach of the crust to a state of equilibrium. This last phenomenon is indicated by the remarkable series of terraces (or elevated shore-lines) visible all along the Gaspé shore. A well-marked terrace about 80 feet above the sea is shown in Fig. 7. A shore current from east to west has piled up sand and gravel across the drowned valley (or *ria*) and produced a very typical bar, which the French call a *barachois*. Furthermore, Matane has several large sawmills supplied by timber brought down the river from the forests of the interior.

Matane has a much more elaborate pattern of settlement than the little villages next to be discussed. There is the usual main road running parallel to the coast, with a rather close series of wooden houses as we approach the town. There is the usual large church, which in Matane is adorned by an enormous cross on the façade. The river is not crossed

at the bar, but inland where the ria is narrower. The presence of the railway station and the sawmills has led to the development of several cross-streets which lead from the main road toward the terrace on the southwest side of the ria. The main shops and official buildings are to be found near the bridge on the west side.

The country is relatively low inland, and here an important road to Amqui and Campbellton ascends the river to the southward. There is no other road yet completed across Gaspé, and indeed this Amqui road *bounds* the peninsula rather than crosses it (Fig. 5). The harbour is shallow and kept open by dredging, and much of the water within the bar is covered with a boom of logs. The town contains only a few hundred inhabitants, and belongs to the *Juvenile* class.

From Matane I journeyed by the public bus right around Gaspé to Campbellton. At times this bus consisted of a Buick car, with two fixed seats and a folding seat, yet sixteen passengers managed to crowd therein. I saw no normal tourist traffic during my visit at the end of August, 1942. Each day the bus carried me about 50 miles, and then it was necessary (and quite acceptable to me)

Fig. 8. A sketch map of the vicinity of St. Anne des Monts (north Gaspé) showing a broad area of low coastland. All the important buildings in the village are shown, but a dozen of the smaller houses are omitted.
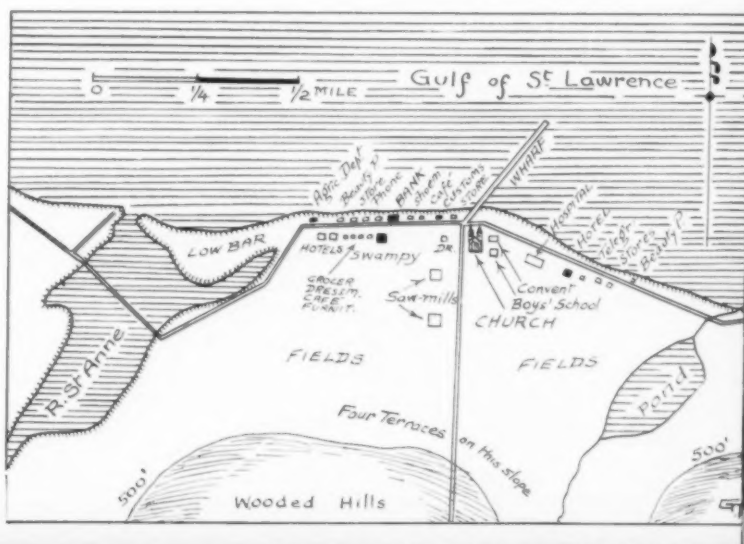
Cap Grand Anse near Rivière Madeleine, showing typical Gaspé houses. Note the motor fishing boats on the bay.

to wait 20 hours for the next stage of the journey.

To the east of Matane the road for the most part runs on one of the terraces, usually about 50 feet above the sea. The lowland varies from about one-quarter of a mile to a mile wide, but in places there are several terraces one above the other, though at times the road descends to the actual coast. The houses mostly have stoops, often without rails, and are usually two stories high, built of wood, square in plan, and unpainted. A small village of less than a hundred houses often contains a fine church, usually prominently placed on a headland. There are rarely any trees or gardens around the houses.

The largest of the villages for a good many miles is Ste. Anne des Monts, whose chief features are given in the map (Fig. 8). Here, as at Matane, the settlement has grown up at the mouth of a large river. Indeed, the R. Ste. Anne is one of the largest of

the northern rivers, and has a peculiarly zigzag course for about 40 miles. Its estuary has been drowned, and there is the usual bar at the mouth, which, however, is not used by the road. The shore here is relatively flat for about half a mile back from the sea, and is covered with fields of grass or oats. The main road is close to the beach, and seems in places to run on a ridge or beach with swampy ground in the rear. There is a large church with twin steeples, flanked by a convent, hospital, and two large schools. Just behind the town are two active sawmills which account for most of the activity in the district. Along the slopes of the wooded hills behind the town four terraces are rather prominent.

In the map I have added the character of the shops, so as to give a clear picture of the anatomy of a Gaspé village. There was a fair-sized steamer at the wharf taking timber aboard at the time of my visit. A leading citizen of Ste. Anne (M. Henri Roy) has very kindly sent me a note dealing with life in the little town. He tells me that the pioneers came from the parishes to the west about 100 years ago. They made a living by fishing, hunting, and some farming. The two former industries are of much less importance now, and farming and sawmilling are the chief
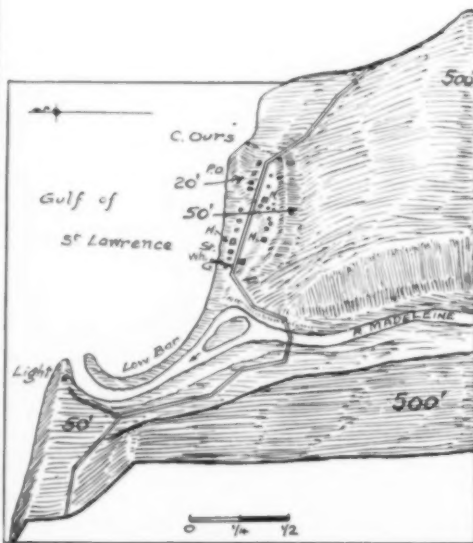

Fig. 9. Diagram of the site of Mont Louis, showing the village built mainly on the bar. The dotted areas are flat farmlands on the floor of the 'canyon' (see also Photo 8).

Fig. 10. Diagram of the site of Madeleine, showing the village built mainly on the 20-foot terrace. Initials indicate the three hotels, the store, wharf and garage.

Photo 8. Looking west to the deep valley at Mont Louis.

Photo 10. Some of the finest coast scenery along the Gaspé coast near Marsouis, looking to the east.

interests. It is the second town in the County of Gaspé, and is the natural and official centre for the western portion of this large area. About two-fifths of the timber is exported to Montreal, while the rest goes, for the most part, to England. Some of the pulpwood is sent to the United States, but most goes across the gulf to Trois-Rivières or to Port Alfred (Saguenay).

The best scenery begins to the east of Ste. Anne. Gradually the plateau approaches the sea until it almost overhangs near Marsouis. The canyon-like valleys are very impressive. Their flat floors and steep walls give them some resemblance to glacial (or "U" section) valleys, but I think that this is misleading. The flat floor is due, I believe, to the infilling by silt, etc., when the sea was somewhat higher, and is an indication of a recent elevation of the land rather than evidence of over-deepening by glacier action. Anse Pleureuse near Mont Louis shows such a 'pseudo-glacial' valley.

The landscape around Mont Louis appears in Fig. 9. The same features appear as at Matane, Ste. Anne and Madeleine, but here the village is mainly situated on the bar itself. Here there is a church and a fairly large hotel, together with six shops of various kinds. A covered bridge crosses the river to the bar, but it was out of order on my visit, and the coach used the old road round the estuary. There is a sawmill near the mouth of the latter, and many farms are scattered over the flat floor of the steep-sided valley (Photo 8). To the east the road has been built on the terrace, about 50 feet above the sea; and scattered farm houses fringe it for a mile or two as shown in the diagram.

The next village is Madeleine, whose main features are given in Fig. 10. There is an important lighthouse at the mouth of the big river, but the village is built on a terrace some way from the estuary. Curiously, there is no church at Madeleine, and the habitants must walk two miles to the next village to attend service. There are three well-defined terraces at Madeleine (Photo 9), and most of the houses are built on the

Photo 9. The village of Madeleine in north Gaspé, looking to the east. It exhibits characteristic French houses on three terraces (labelled A, B, C).

Cap Gros Morne, eight miles east of Mont Louis, showing the folded Palaeozoic strata.

Courtesy of
H. V. Henderson

middle terrace about 20 feet above the sea. Alongside a low cliff to the east are small houses containing the post office and the telegraph station. It is well to note that small as Madeleine is, it is about as important as any of the settlements which occur, at intervals of about five miles, along this coast between Mont Louis and Fox River. Both Madeleine and Mont Louis are in the *Infantile* stage.

Eastward of Madeleine are the fishing grounds, and a score of small boats were visible (anchored a mile or two off shore) from many of the small settlements hereabouts. At Grand Etang the road leaves the coast for ten miles or so, and later turns inland at the small town of Fox River to cross the narrow "end" of Gaspé Peninsula. The town of Gaspé is very much larger than any which we have just considered, but it was an important war base, and I did not attempt any survey.

The famous scenery around Percé is due to the faulted topography of this part of Gaspé. An elongated strip of resistant Devonian rock has been thrust up along the coast, and the end of this forms Percé Rock. It is 2,100 feet long, 300 feet wide and 288 feet high. The well-known arch is 60 feet high (Photo 11). In the days of the early settlers there were two such arches, but one has collapsed. At low tide the rock is joined to the mainland by a sandbar. The dip of the rocks is nearly vertical so that the cliffs are almost unscalable. Large colonies of herring gulls and cormorants nest on the top of the rock.

The south shore of Gaspé is somewhat monotonous beyond Percé. The country is nearly flat, with a steep drop of ten to thirty feet at water's edge. The land fringing the sea is cleared for a mile or so from the shore, and behind the farms are the forests which have altered very little since pioneer days. The French villages strike one as rather bare, and a square box-like house of two stories is usual. As we proceed to the west it is interesting to see new types of houses entering the picture. At first a central gable with an ell at the back (as at B in inset, Fig. 11)

Photo 11. The village of Percé, with the cave or arch in the cliffs of the Percé Rock appearing in the background.
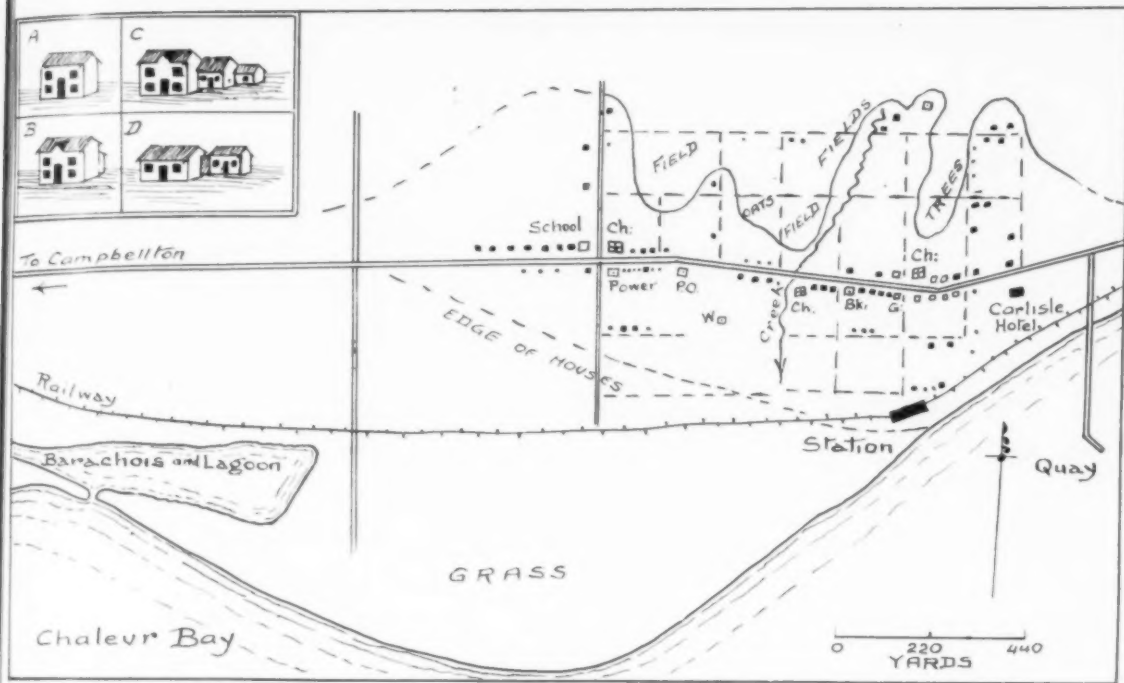
Courtesy of H. V. Henderson

Fig. 11. *A generalized map of the town of New Carlisle. Inset are four sketches showing types of houses found in the southeast of Gaspé.*

makes its appearance as an addition to the simpler square box type (which is shown at A). Then an extra block is added to the other, usually *en échelon* at one corner; often there are two such additions (as shown in the inset at C). In the vicinity of New Carlisle, the type sketched at D was to be observed, where a short passage links the buildings.

Most of the small bays are crossed by sandbars, which are much larger than those on the north coast. At Barachois, as the name implies, the village is built largely on the bar. Usually the south coast railway (which reaches to Gaspé) makes use of these bars, but the main road has to travel around

the bay. This often adds many miles to the journey, as near Douglastown, Barachois and Chandler. Near Newport the racks for drying fish are much in evidence, with the small peaked hoods which cover the racks at night.

My last rapid survey in the Gaspé region was made at New Carlisle (Fig. 11). Here the pattern of the town is quite different from that shown in my previous Gaspé surveys. The streets are arranged in a gridiron, and the houses are surrounded with gardens containing large trees. There are also avenues of trees along the main street. All this seems to suggest a different outlook among

Photo 12. *A view in the centre of Prince Edward Island, looking southwest from Wiltshire.*
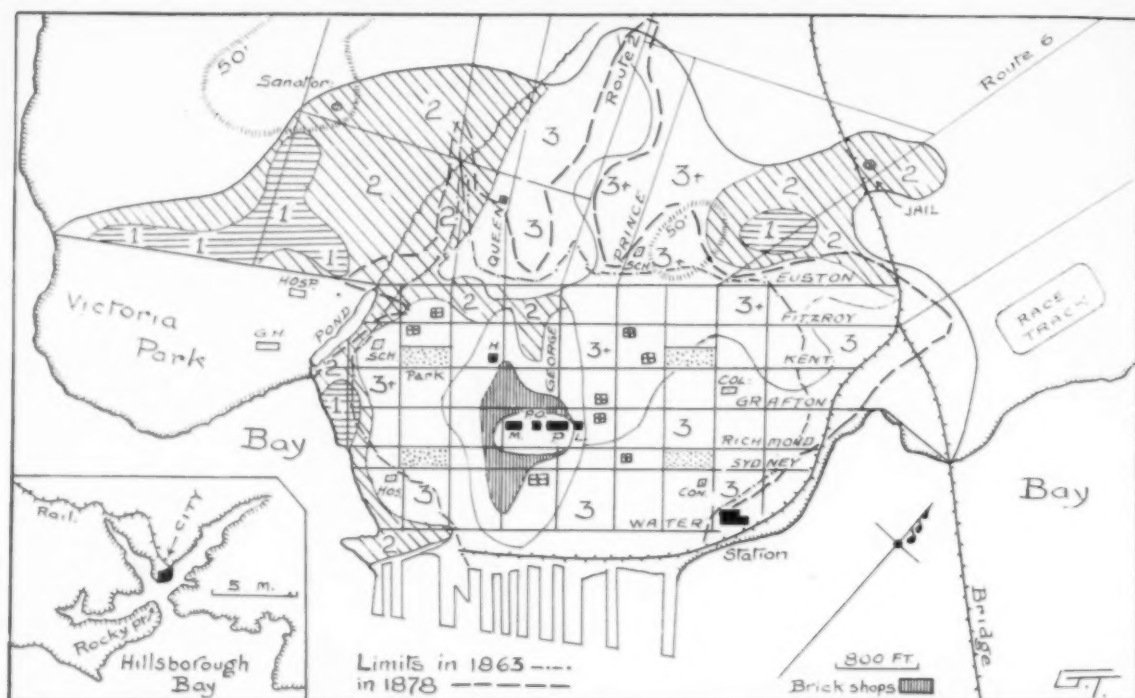
Fig. 12. *A survey of Charlottetown showing also the limits of close-set houses in 1863 and 1878. The figures refer to the class of residence. Areas with better-class houses are ruled. Inset is a map of the drowned valleys forming the harbour.*

the English settlers, for this is an English 'inclusion' among the dominant French settlements. New Carlisle was one of the few places founded hereabouts by the Loyalists around 1783. It is stated by J. M. Clarke in his charming book *The Gaspé* (Yale, 1935) that Governor Hamilton spent £80,000 to establish this town as a refuge for the emigrants from the States.

There is a quaint picture of New Carlisle given in Pye's *Canadian Scenery* of 1866. There were then about 200 folk in the vicinity, which is, I should think, more than live there now. At that time there was already a Town Hall and a Court House of stone, two hotels and five shops. The present condition of this pretty little town is shown in my survey (Fig. 11). There is a wharf at the east end of the town, where also are the two rather large hotels. There are three churches, a bank and a wireless station. At the western end is an office connected with the supply of power in the district. Four

cafés, three stores, three garages and a few other small shops complete the picture. The railway station is on the shore, and a large expanse of rough grass separates the railway from the lagoon and coast to the southwest. A few large residences have been built amid the trees at the northeast corner of the town, but the other houses on the cross-streets are mostly of the third or fourth class. Much of the activity of the town would appear to depend on the summer automobile traffic. The town is in the *Juvenile* stage of evolution.

II. *Site and Pattern of Charlottetown*

From the mainland at Cape Tormentine the steam ferry carries a large part of the train across the nine-mile straits to Borden on Prince Edward Island. This is quite a different landscape from most of what we have been considering. The whole island is farmed, but in a somewhat diversified pattern, so that it does not, for instance, in

Photo 13. *Early wooden houses in the northeast quarter of Charlottetown (class 4)*

Photo 14. *Typical wooden houses (class 3) in Charlottetown, on the west side of the little park in Rochford Square*

the least resemble the closely settled plains of Iowa. Though no point reaches 500 feet, yet the scenery is characterized by innumerable mature valleys. Hedges are abundant, and lines of pine trees grow along farm boundaries. A view across the island near its centre appears in Photo 12. It is about 50 miles from Borden to Charlottetown.

The island was probably discovered by Cartier in June, 1534, but it was not till a century later that Champlain placed it on his map of 1634, giving a very correct outline to the crescent island. In 1650 or thereabouts, Denys first exploited the coal of Cape Breton, and received a grant of the island, but it is not certain if he made any use of it. It was not till 1713 that some Acadian emigrants temporarily settled in the Isle of St. Jean, as it was called. In 1760, when it was formally ceded to the English, it contained over 4,000 inhabitants. After the practice of those days the land was now granted to a group of English and Scottish people, most of whom never left Great Britain. In 1770, it was separated from Nova

Scotia, but the present name was not given until 1799.

The first settlement near Charlottetown was on Rocky Point (inset in Fig. 12), where a small fort was erected to protect Port La Joie. Here, in 1728, there were log houses for 115 settlers. By 1752, the number had fallen to 38 persons, and, in 1758, over two thousand of the French settlers in the island were deported to France. In 1764, a general survey of the island was made, and Captain Holland reported as follows (*Warburton's History*, p. 125): "The capital, called Charlottetown, is proposed to be on a point of the (Hillsborough) Harbour; as being one of the best, and nearly a centrical part of the Island, it has the advantage of easy communication with the interior by means of three fine rivers." A later report dated October, 1768, describes some of the earliest buildings. "One was a dwelling-house 56 by 26 feet, one story, clapboarded, with two ovens, six fireplaces and a cellar. The other was the same size, clapboarded, and shingled, and was used as a store."

Photo 15. *A fine mansion at the west end of Richmond Street, Charlottetown*

Photo 16. *The Provincial Building in Charlottetown in which Federation was decided upon in 1864.*
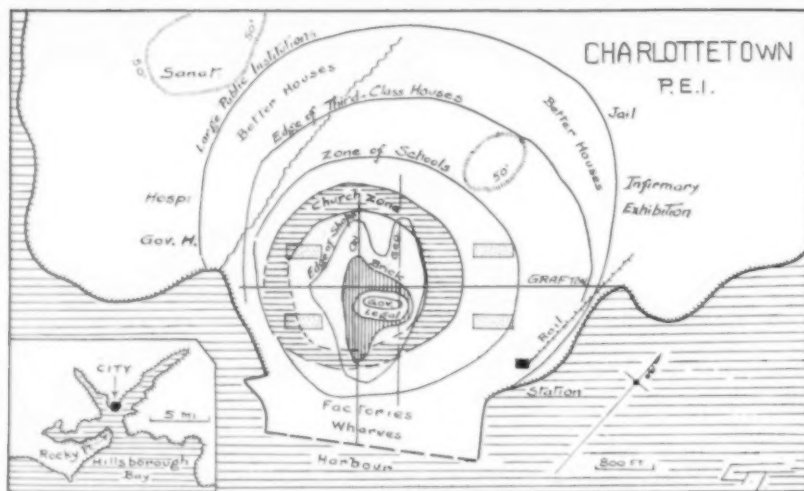
Fig. 13. A diagram of the functional zones in Charlottetown, somewhat generalized. They illustrate the regular arrangement in a town in equilibrium.

Warburton also quotes a report of 1771 dealing with the revised plan of the town. The town lots were to be 84 by 120 feet, and the five principal streets were to be 100 feet in breadth.

In Fig. 12 the plan of the city of to-day is charted. It has been built on a promontory on the north side of the trident-shaped estuary (see inset). This promontory nowhere rises to fifty feet, but slopes gradually from the centre to the bay. A minor cape to the west was set apart for a park, and contains Government House. The four main streets were Queen and Great George (leading to the wharves) crossed by Richmond and Grafton. In the central square the chief government offices were built. To-day we see the large Provincial Building (Photo 16), where Federation was agreed upon, in the centre, with the Law Courts to the east, and the post office and market on the west. The checkerboard pattern was carried out ruthlessly, but one improvement was to arrange for four small parks, which are shown dotted on the plan. One of the parks is illustrated in Photo 14.

One of the most interesting features of Charlottetown has been referred to earlier. It is the stationary character of the population of both the province and the capital. Hence we may suppose that the city has long reached a state of equilibrium, undisturbed

by the overlapping of residential zones which is so marked a feature in most cities of the Old World. By the year 1863, the houses extended over the whole checkerboard, but no further; and there is very little change since 1863 except near the railway station. Even to-day (1945) little later change is visible in eighty years, except in the growth of a suburb of first and second-class houses along the northern fringe of the city.

I have attempted to classify the zones in this old-established city, and my conclusions are given in Fig. 13. In the centre is the block of administrative buildings. Closely surrounding this, and mainly in Richmond Street, are the legal and professional offices. Clustered along the central parts of Queen and Grafton Streets are the more important stores, built of brick, and usually three or four stories in height. Outside of this zone is a zone of wooden shops of less importance, which are also found in George Street. The many churches have almost all developed in a belt which includes the four parks. Outside this again, and about one-third of a mile from the centre, is a belt of large schools.

As is usually the case, the original houses within the city have declined in status, and are now mainly of third-class character. The better houses are naturally found toward the park, and in the higher land to the northwest and northeast. The wharves and the

railway areas have attracted the factories and the poorer houses. This tends to give us a zone of better dwellings about one mile away from the centre of the city. For various reasons institutions such as jails, hospitals, race tracks, etc., are found in an outer zone beyond those so far enumerated. During the last seven censuses the population of Charlottetown has been as follows: 1881, 11,500; 1891, 11,400; 1901, 12,100; 1911, 11,200; 1921, 12,200; 1931, 12,800; and 1941, 14,400.

The changes in the character of the town are illustrated in the sketches and photographs given in this memoir. In Fig. 14 at the left we see the official post office as it appeared from 1780 onward. It was erected close to the shore on Water Street, and torn down in 1834. On the right in the same Fig. 14 is a sketch of the main houses and shops of the city near the junction of Queen and Grafton Streets in 1870. (These are based on illustrations in the *Prince Edward Island Magazine* for 1899-1900). The four photographs, 13, 14, 15, 16, show various buildings still visible in the city. The one-story wooden cottage illustrates an early type

which survives in a street near the station. The two-story wooden house under the trees is representative of those on Rochford Square, with St. James Church in the background. The fine mansion in the third photo has been at times the home of the Lieutenant-Governor, and is situated on the shore at the west end of Richmond Street. The last photo shows the historic building in which Federation was agreed upon in 1864. It is a pleasing example of official Renaissance architecture. The city is in the *Early Mature* stage of evolution.

I have now completed my survey of a number of typical settlements around the Gulf of St. Lawrence. The towns are classified in a simple fashion, and samples of all the stages in evolution from the *Infantile* to the *Mature* can be studied by the reader. French influences are dominant, but some towns are progressing while others are stagnant. It is hoped that this study of the sites of some of the earliest settlements in the Dominion will be followed by others dealing with other quite different illustrations of the various features of Canadian urban geography.

Fig. 14. Sketches of old buildings in Charlottetown; that on the right shows former shops in Queen's Square.

From Prince Edward Island Magazine, 1899-1900.
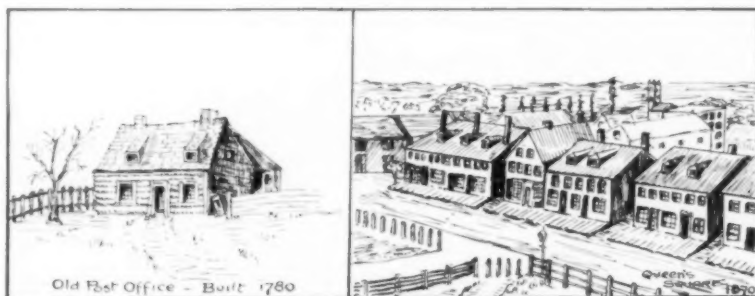
Left:—A CFPU production crew shoots a fast bit of action during the filming of "Smoke of Battle".

Below:—Recording last-minute activity preceding signal for smoke screen.
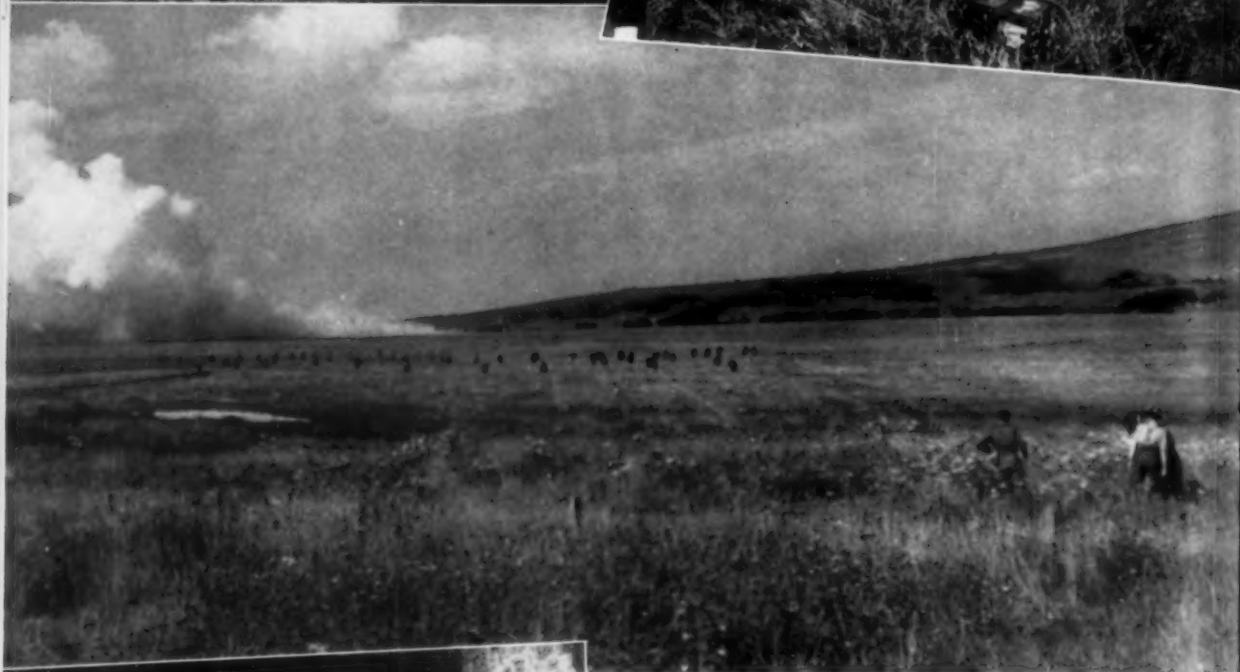
Above:—As Canadian infantrymen sweep forward under cover of protecting smoke, CFPU cameraman, right, records the action.

Above:—Midst thunder of nearby guns, Canadian soldiers view an impromptu showing of a Canadian Army Newsreel.

Right:—The cameraman records a realistic attack on "enemy headquarters".

Typical of a CFPU production crew "on location" is this team, which made the picture "Smoke of Battle". Left to right: Sgt. Allan Stone, film cutter; infantry officer in charge of troops used in picture; Capt. Geo. Noble, cameraman; Capt. Joe Peck (wearing earphones), infantry officer attached as technical adviser; Major Gordon Sparling, producer, and Lieut. Howard Smith, director.

History in the Taking
Some Notes About The
Canadian Army Film & Photo Unit*

by JON FARRELL

THE SITUATION looked very grim for a force of Canadian infantrymen fighting, with tank support, in Ortona, Italy, on the morning of December 27, 1943. The town was partly cleared, but the Germans were fighting doggedly for every street and every house. It was a matter of touch and go.

A troop of tanks was inching its way along one of the streets. With them was a soldier carrying a movie camera and tripod. Suddenly they came under point-blank fire from a German anti-tank gun position. As the tanks ducked for cover behind nearby buildings the man on foot proceeded ahead of them, seeking a suitable vantage point for pictures. He found a spot to his liking, then calmly set up the camera, adjusted the lens.

From their cover the tank men watched his unhurried, deliberate movements, which suggested that he might have been preparing to "shoot" nothing more alarming than a giant panda at the zoo, or a honeymooning couple at Niagara Falls. Amazed, the tank commander opened his hatch and, with his own camera, took a picture of the movie cameraman in action.

In another moment the issue at that particular spot was no longer in doubt. The anti-tank gun was silenced, the enemy position overrun. The Canadians pushed on to clear the rest of Ortona.

The young man with the tripod was the Canadian Army Film and Photo Unit's Sgt. Jack Stollery, 27, of St. Thomas, Ontario. For coolness under fire at Ortona, and on similar occasions, he was awarded the Military Medal.

Stollery's citation reads, in part: "His appearance with the forward troops in moments of great danger . . . was in no small way responsible for bolstering their morale."

Another CFPU cameraman who filmed action throughout the Sicilian and Italian campaigns was Sgt. Jimmy Campbell. He

subsequently accompanied the Canadian troops into Normandy. To-day you may find a grave in a meadow near Caen, marked with a white cross and the inscription: "K53057 . . . Sgt. James Campbell . . . Canadian Army". He was killed by a mortar bomb as he operated his camera; but the film was undamaged and eventually it became part of the deathless story on celluloid which tells of the Canadians' role in the decisive victories at Caen.

There is another small plot near the beach at Anzio, Italy. It is the grave of Lieut. Terry Rowe, CFPU "still" photographer. Rowe was killed also while on the job. With him when the shell burst close by was Capt. Colin McDougall, cameraman and director. Capt. McDougall was badly wounded but is back now with CFPU on the Western Front in Europe.

When Allied forces made their attack on Walcheren Island, one of the enemy strong-points menacing the approach to Antwerp, cameraman Sgt. Lloyd Millon was in a Canadian assault boat which took a direct hit from a German shore battery. There is no grave or cross to mark the scene of Sgt. Millon's last assignment. He is just listed officially as "missing, presumed killed".

The foregoing incidents help explain why the Canadian Film and Photo Unit has secured some of the best pictorial records of this or any other war. They also indicate that lens lugging in the front line, while it may not be the toughest job in the army, is "no picnic". It calls, however, for attributes other than mere courage.

The good cameraman or director is first of all a trained soldier. He carries small arms and he knows how to use them if he has to. He is also a combination of technical expert, roving reporter, salesman and diplomat. Immediate peril is just one of his occupational hazards. His job does not always take him within range of shot and shell. In the course

Typical of front-line moviemen who keep Canadian newspapers supplied with up-to-the-minute war pictures (top to bottom): Sgt. W. R. Sherwood, Kamloops, B.C.; Sgt. L. G. Clarke, Moncton, N.B.; and Sgt. L. E. Weekes, Vancouver, B.C.

of a day's work he is likely to have dealings with every rank from private to field marshal, and a supply of "know how" or *savoir-faire* is just as essential to securing good pictures as is a properly focused lens on the camera.

"The work of the film director and the cameraman in the army often involves about twenty-five per cent actual 'shooting' and seventy-five per cent knowing how to 'win friends and influence people'", says Capt. George Noble, a member of CFPU since its inception, and prior to that a professional cameraman for many years in civilian life.

"Getting good results demands tact, patience, a quick eye and a ready wit. All our men have these qualities, at least in some measure. They know that a good approach, a courteous attitude, a brisk and skilled handling of their equipment can mean all the difference between a dull, routine bit of film and a fresh, lively sequence."

It is probable that CFPU cameramen and directors know more, in a general way, about army organization, equipment and personnel than do any other group of men in uniform. Every commanding officer has a detailed knowledge of the work of his own particular formation, but he has neither time nor opportunity to learn much about other branches of the service. Film crews have a chance, literally, to study the whole picture.

A camera unit may be assigned, for instance, to make a film about tanks. There may be several different "angles" to the story—the operation of tanks in battle, their maintenance and repair, the matter of anti-tank weapons, how tanks are destroyed from the air. To secure the film the director consults experts in a number of separate units, and when the job is completed he and his cameramen are pretty well informed on the subject of tanks.

Some of the finest pictorial records to come out of this or any other war have been credited to the CFPU. Four of the top-ranking Canadian lensmen who have helped in this enviable achievement (top to bottom): Lieut. H. G. Aikman, Grandview, Man.; Sgt. K. B. Dougan, Orillia, Ont.; Sgt. R. H. C. Angelo, Iroquois Falls, Ont., and Sgt. Harry Clements.

Left:—Lieut. Terry F. Rowe, of Winnipeg, talented "still" photographer, whose loss is still mourned by the CFPU. Terry died on the Anzio beachhead.

Right: A CFPU camera crew prepares for action during Army manoeuvres somewhere in England. Quick eyes, trained minds, and the ability to make lightning decisions, are essential.

In a quiet meadow near Caen these CFPU members, Sgt. Alan Grayston, Lieut. Geo. Cooper, and Sgt. Jack Stollery, pay silent homage to the memory of Sgt. Jimmy Campbell, killed by a mortar bomb as he operated his camera in the thick of the fighting.

To the Western Front via Sicily and Italy came Capt. Colin McDougall, veteran cameraman-director of the CFPU.

Centre:—First Allied photographer to land on French soil, Sgt. Dave Reynolds of the CFPU trained as a paratrooper, strapped his movie camera on his back and dropped into Normandy from the skies. He is now back in Canada.

Right:—Atop one of the Unit's vehicles, Capt. Noble lines up his sights for a high angle action shot. Kibitzing, is Major Jack McDougall, director and production expert. Both are original members of the CFPU.

On D-Day he "scooped the field". Sgt. Bill Grant's movie film of the actual landings were first back in London by several hours—first in New York by a full day. Later wounded, he returned to Canada to recuperate.

Cameraman Sgt. Jimmy Campbell, killed in action a few days after this picture was taken, lighting a cigarette for an aged milkman of newly-liberated Caen.

Left:—As Sgt. G. D. Petty rounded this ruin, fighting broke out down the street. Within a few seconds his camera was whirring, and another Holland battle sequence was preserved on film.

Above:—Sgt. Weekes, cameraman, fills in a spare hour working on a cartoon for the Canadian Army newspaper, Maple Leaf.

Left:—Under shellfire himself, a movie cameraman of the CFPU trains his lens on Cap Gris Nez, recording on film the heavy bombardment which preceded its capture by Canadians.

Below:—Since the assault craft from which he was filming the attack on Walcheren Island in the Scheldt Estuary disintegrated under a direct hit from an enemy battery, Sgt. Lloyd Millon, centre, movieman of CFPU, has been listed as "missing, presumed killed". With him when this picture was taken were four British Army cameramen.

So it goes with every activity of the army, in training or in action. And it is not hard to understand why few Canadians overseas are so widely known among army personnel as are a score or so of men in CFPU.

The Film and Photo Unit was established in September, 1941, as a part of the Army Public Relations Branch. Since then few events of any importance relative to Canadian troops in Britain or in Europe have escaped the unit's omnipresent lenses.

For nearly two years CFPU was mainly concerned with recording the various aspects of the army training programme. Not until the invasion of Sicily in 1943 were the cameramen able to train their viewfinders on scenes of actual combat. A camera crew, headed by Capt. Alastair Fraser, went ashore with the first wave of invasion troops. One of the movie men, Sgt. Alan Grayston, was aboard an L.C.I. which was almost the first assault craft to "touch down". Grayston actually had to wait for a while, crouching with his camera under occasional cross fire, until the main body of troops reached the beach. The film he obtained then included some of the best footage "shot" by any Allied cameraman on that operation, and it was given world-wide newsreel distribution.

Provisions for pictorial coverage, both movie and "still", of Canadian invasion

Right, top to bottom:—

Sgt. Sherwood "shoots" a German wall sign which reads "Cameras Are Forbidden".

Sgt. Bill Cox enjoys an informal chat with Maj.- Gen. R. F. L. Keller, C.B.E., who commanded an assault division during pre-invasion manoeuvres. Later, at Falaise, Cox was machine-gunned, and returned to Canada to convalesce.

"Stills" taken by Capt. F. L. Dubervill, shown here in a Normandy dugout, were the first "on shore" invasion pictures to reach the United Kingdom. Radioed to New York, they were five hours ahead of the first "still" pictures from United States photographers.

The young man with his arm in a sling is Sgt. Jack Stollery, M.C., much-wounded ciné cameraman of CFPU. He won the M.C. for the example he set by his extraordinary coolness while filming close-up battle sequences in Italy.

forces on D-Day were thorough and elaborate; so it was not merely by chance and good fortune that CFPU turned in a performance which, in a number of respects, surpassed those of other Allied picture units. Here are some "firsts" with which it was generally credited:

Sgt. Dave Reynolds, who had been trained as a paratrooper for this particular assignment, dropped into Normandy with his camera—the first Allied cameraman to land on French soil.

Sgt. C. E. Ross was the first Allied cameraman to set foot ashore with the sea-borne invaders.

Sgt. Bill Grant's movie film of the actual landings "scooped" the field by being the first back in London by several hours and the first to reach New York by 24 hours.

"Stills" taken by Capt. F. L. Dubervill were the first "on shore" pictures to arrive back in the United Kingdom. Radioed to New York, they were there some five hours ahead of the first "stills" from American photographers.

CFPU photographs were given most prominent display in all London newspapers on D Plus 1 and D Plus 2.

The excitement among Allied forces' public relations people in London when this first film from Normandy was screened for the censors at SHAEF'S "Theatre A" can well be imagined. One of the CFPU officers who was there described the occasion in these words:

"The theatre was packed with a lot of senior American officers, the censors and our own representatives. We sat through three or four thousand feet of rather dull stuff having to do mainly with preparations for embarkation. Then came Sergeant Grant's material. It was good—damned good! All through the theatre you could hear people whispering and muttering with surprise. When it was all over there was much excitement and planning as to how to get the film to the United States in the quickest way possible."

And finally, CFPU film on the invasion provided the "climax shots" for all of the five British newsreels released in London on the first Sunday after D-Day. In this regard it should be noted that CFPU movie material is immediately available to the American newsreel companies and to the National Film Board of Canada, which makes frequent use of it in its regular feature productions. It is also at the disposal of the British Ministry of Information, for use in special short films produced by M.O.I. and circulated from time to time in many European countries, liberated or otherwise.

Incidentally, the original strip of film which actually comes from CFPU cameras is never cut up and is seldom used for screening. From it "dupe negs" (duplicate negatives) are made for distribution. The master copy itself is sent to Ottawa, where it is carefully preserved as a sort of historical document in the vaults of the National Film Board. Similarly all "still" photos are preserved for the records.

Picture making, as we have noted, is a highly personalized performance, and the story of a film unit is largely the story of the men who actually handle the cameras and of the men who direct and co-ordinate their work. But there are many other uniformed men (and a few CWACs) working on the "assembly line" which links the "shooting" of an incident with the viewing. Important functions are performed by despatch riders and drivers; by darkroom experts; by cutters and editors who process the film for screening; by the writers who supply the "still" captions or the movie commentary, and by the various clerks who attend to the handling and documenting of film at its several stages.

Responsible for the over-all functioning of CFPU overseas is the Deputy Director of Army Public Relations in London, Col. W. G. Abel. His assistant is Lieut.-Col. Eric L. Gibbs, who arranged for most of the intricate chain of communications which has worked so smoothly for CFPU during and since the Normandy invasion.

Since early in 1944 the Film Unit has operated as three distinct groups. Number 1

Group, in London, is headed by Maj. Gordon Sparling. Its chief concerns are administration and distribution, production of feature films, and the training of reinforcements for groups in the field.

Number 2 Group covers Canadians in action in Italy, and Number 3, under the direction of Maj. Jack McDougall, follows our Army in Western Europe. Both Maj. Sparling and Maj. McDougall had extensive film experience with Associated Screen Studios, of Montreal, before donning uniform. Maj. McDougall was the first director called into the service of CFPU back in 1941, and his administrative and directive skill have probably contributed more to the success of the unit than that of any other individual. First full-time photographer to step from civvie street into Army Public Relations was Maj. L. A. Audrain. He joined P.R. in 1940 and helped set up the original photographic department which eventually was merged into CFPU.

The time element is vital in handling spot news film from the battle-fronts, and no other Allied film unit is better prepared than CFPU to get its product quickly from "producer" to "consumer". Here, in brief, is what happens:

From the scene of action the cans of film are flown to an airfield in Britain, and from there they are taken by despatch rider or jeep to CFPU's main office in London. After being processed there the reels are rushed to a theatre for screening before the censors. At the same time they are viewed by British newsreel men, Ministry of Information officials and others who may be interested.

As soon as the film gets the censors' O.K. it is despatched by air to Canada. Under favourable conditions, no more than 50 hours may elapse from the time a roll of film leaves the front until it reaches the Dominion. Meanwhile a few of the best "still" photos will have been sent to the offices of Cable & Wireless in London for transmission to a dozen different parts of the globe by the amazing wirephoto process.

An increasingly important CFPU activity is the production of "theatricals"—that is, short feature films. Several of these have been distributed widely in Canada by the National Film Board and in many other countries by the British Ministry of Information, which has issued them with commentaries in French, Spanish, Portuguese, Chinese, Arabic and other languages. Such productions as "Wood for War", dealing with the Canadian Forestry Corps in Scotland, "You Can't Kill a City", showing the

Right:—Braced behind a signboard on a Dutch roof-top, a cameraman records the arrival of Allied armoured forces.

Below:—In the prow of a Canadian assault craft as it nears the enemy-held beaches—ready to "shoot".

emergence of Caen from its ordeal, and "Left
of the Line", made in conjunction with the
British Army Film Unit, are on a par with
the best of the new pictures in the rapidly
expanding field of documentary film.

A number of army training films have also
been made by CFPU. These dealt with sub-
jects which could not be adequately treated
in Canada — the army's flame-throwing
equipment, for instance, which was on the
secret list when a film about it was produced
and entitled, for obvious reasons, "Ronson".

Still another project of the unit is the
Canadian Army Newsreel, in which CFPU
takes a particular pride, for it is the only
newsreel of its kind to come out of this war.
"Of the troops, by the troops and for the
troops", it was started as a monthly venture
in November, 1942, for distribution among
army formations only. The reel comprises a
selection of the best "footage" secured by
CFPU cameramen. It is now being produced
on a weekly basis and some 40 prints of it
are flown regularly to Canadian troops
wherever they may be.

The camera units working in the field
share practically all the rigours and hard-
ships of the front-line troops. They eat the
same sort of rations. They sleep in barns,
perhaps civilian billets when they can find
them; in tents when they cannot. Often their
only "home" is a slit trench.

A typical field section may consist of one

"still" photographer, who is usually a com-
missioned man and in charge of the group;
two movie cameramen (all of these have the
rank at least of sergeant, several are com-
missioned); one or two drivers, and a des-
patch rider. Such a section will travel in
two jeeps, with trailers; possibly it will have
the use of a light lorry. Chances are it is
covering the activities of a whole division,
and so it must be prepared to move quickly
and often.

The exploits and adventures of these tri-
pod toters, both in and out of actual combat,
will no doubt enliven the pages of more than
one book which will be written some day
about World War II. You may then, per-
haps, read the full story of CFPU's Capt.
Jack Smith, M.B.E., and how he came by
that decoration. It will tell of how a freighter
carrying him to North Africa was torpedoed
in the Mediterranean; of how he helped save
the lives of several burned and wounded men
while ammunition exploded and fire raged
nearby; of how he saved more lives in the
water after the vessel sank, and of how he
kept up the morale of survivors on a life
raft until rescuers arrived.

Or again, you may learn in detail of an
incident in France one hot day last August,
when a party of three cameramen and two
drivers, trying to take their two jeeps into
a newly-captured village, ran into enemy
machine-gun fire which wounded four of the

Pte. Nadina Manning, CWAC, examines test strips.

five. The story of how the four wounded men finally reached an advanced dressing station, and of how the fifth managed to get their jeeps and equipment safely back to camp should make a thrilling chapter of some post-war chronicle. (Incidentally, it was at that same village, St. Lambert, on that same August day, that Maj. David Currie, of the Canadian Armoured Corps, was winning the Victoria Cross for his heroic part in helping to close the Falaise "Gap".)

For all its hazards and discomforts, the job of the cameraman in khaki is a curiously absorbing and satisfying one. I have had the opportunity of seeing many of these lads at work in the battle areas, and I would say they derive more pleasure from their daily routine than any other group of specialists in the Canadian Army.

Yes, they are a cheerful crew; and they seem always able to find a laugh to brighten the darkest moments. After that little skirmish in France, mentioned above, one of the wounded lensmen was being helped on to the operating table at the dressing station. He was obviously in considerable pain.

"How did it happen?" asked one of the first aid men, as he bared the leg which had stopped a machine-gun bullet.

The sergeant's reply, through clenched teeth, was a masterpiece of ironic understatement.

"A dog bit me", he said.

Centre right:—Capt. Gordon McLean, producer of the Newsreel, and a civilian engineer, are shown at the "mixing panel" where voice commentary and background music are synchronized on the reel's sound track.

Bottom right:—Chief editor, Sgt. Bruce Newlands, views a strip of newsreel film through a sound moviola—a device which enables him to see and hear the reel as clearly as if it were on a screen.

Above:—Sgt. K. G. Ewart, one of the editors of the Canadian Army Newsreel, synchronizing voice, music and sound effects with the visual action on the film.

Victoria Hall, Cobourg. Officially opened by the Prince of Wales, September, 1860.

The Town of Cobourg, 1798-1945

by EDWIN C. GUILLET

ONTARIO TOWNS have now reached an age that gives them some claim to antiquity. While few of them can even approach the towns of Eastern Canada in the extent of their memories, almost all but the mining settlements of the North have now a very respectable history.

Cobourg, County Town of the United Counties of Northumberland and Durham, is situated on low land on the Lake Ontario front of Hamilton Township, seventy miles east of Toronto. Several small streams, and one larger—the Factory Creek—enter the lake near the town, and the swamp cedars that still line their shores enable us to visualize the site as it was before settlement commenced. The Kingston Road, or King Street as it is called in Cobourg, passes through the centre of the town a few hundred yards from the lake.

Cobourg does not date from United Empire Loyalist days, but its first inhabitants followed close upon their trail. The sons of Loyalists, other enterprising Americans, and a few early arrivals from the British Isles made up its first settlers. Tradition and the more factual records of land grants unite to bestow upon Eliud Nickerson the title of first settler on the site of Cobourg, in the year 1798. It appears, however, that Elias Jones, store-keeper, Liberty White, miller, and Asa Burnham and Nathaniel Herriman, farmers, were settled in close proximity to Cobourg about the same time, and within a few years Jones had opened the first store in the district.

Katherine Chrysler White, who came there as a bride in 1813, said the site was 'quite a wilderness, with a few small clearings, only three houses, and a rough cordu-

roy road to the lake'. The road was Division Street, leading past White's Mills and northwards towards Rice Lake. At first the settlement was called Hamilton, after the Township, but, in 1819, the inhabitants selected the name Cobourg in honour of the marriage of Charlotte Augusta, Princess of Wales, to Prince Leopold of Saxe-Coburg-Saalfield. At first the name was spelled both in the German and English versions, but officially it was always 'Cobourg'.

If the earliest settlers were predominantly American in origin, they were joined, between 1815 and 1820, by emigrants from England and Scotland, most of them discharged half-pay army and navy officers whose services were no longer required after Waterloo. The first intimate picture of life in the settlement is given in the letters of Frances Stewart, who visited the village in 1822. She found that many of the ladies lived a gay life:

'They dress in very smart suitable style. They think nothing of giving fifty or one hundred guineas for a fur muff or tippet. . . . We went first to the Covert's who are very decidedly English; then to Capt. Boswell's where we remained for tea; two other English families were here, the Faulkners and the Sowdens from Bath. They came to Cobourg a year and a half ago, and now have the nicest farm here, with every comfort. The people here have a book society among themselves, each member paying four dollars per annum.'

In 1824, when Mrs. Stewart visited Cobourg again, there were about one hundred inhabitants and a much-improved village: 'Numbers of houses have been built, two large shops are nearly finished. Rev. Mr. McAulay has a nice new parsonage, and there is a neat little Methodist chapel.' The Methodist minister was Anson Green, and his circuit comprised a route of hundreds of miles east, west, and north into the Indian lands beyond Rice Lake.

The chief topic of conversation in early Cobourg, says Mrs. Stewart, was the projected formation in London, England, of the Canada Company to encourage emigration to Upper Canada; and a good deal of human experience, much of it sad and some of it vicious, is implied in the fact that there still exists a Toronto office of that Company to keep an eye on farm mortgages, some of which originated a century and more ago.

The Royal Mail Line of Stages. William Weller was the first Mayor of Cobourg, 1850.

As emigration to America changed from a leisurely adventure to a grand rush to escape poverty and unemployment, depression and repression, Cobourg became a port of entry for lake shipping, then almost entirely by sailing-ship. The Peter Robinson emigration of Irish, arranged at government expense to relieve the unfortunate state of Ireland, encamped, in 1825, on the sandy beach which is now so important a part of beautiful Victoria Park; then they slowly walked out to Rice Lake, and onward by flat-bottomed boats up the Otonabee to Scott's Mills (Peterborough). A few of these, and many later Irish, settled in Cobourg in the district always called 'Corktown'.

The enterprising inhabitants of Cobourg were soon busy forming a company to build a harbour—for there was no natural protection; and a charter for a railroad northward to tap the rich timber resources along the 'back lakes' was being sought in the early 'thirties, before there were railways anywhere in Canada, and but few elsewhere in

1841.
SUMMER ARRANGEMENT
BETWEEN

KINGSTON & TORONTO
BY THE
BAY OF QUINTE,
Six times a week each way?

FROM the 1st of May next and during the summer months, the Mail Stage will leave Belleville for Toronto immediately after the arrival of the Bay Steamers, passing through Port Trent, Brighton, Colborne, Grafton, Cobourg, Port Hope, Clarke, Darlington, Whitby and Pickering.

GOOD FOUR HORSE COACHES

(Entirely new,) with steady experienced drivers, going through from Belleville to Toronto in twenty four hours, and from Cobourg to Toronto by day light.

REDUCED FARES.

Belleville to Toronto,	- -	120 miles.	- - £1 0 0
Cobourg to Toronto,	- -	72 do.	- - 0 10 0
Port Hope to Toronto,	- -	65 do.	- - 0 10 0

The above line of Stages will leave the General Stage Office, Toronto, for Belleville, every Sunday at 10 o'clock, A. M. and every Monday, Tuesday, Wednesday, Thursday, and Friday at 5 o'clock, P. M. after the arrival of the Steam Boats from Niagara and Hamilton.

Strangers will find a great advantage in taking this route; by leaving Kingston (the Capital) in a Steam Boat, they have a fine view of the country forming the Bay of Quinte, fast rising into importance since the late alteration of the Seat of Government, and taking the Stage at Belleville, will pass through the above named townships, which for fertility of soil and density of population will yield to none in the Province, thus reaching the city of Toronto at 3 o'clock P. M.

WM. WELLER,
Proprietor,
Cobourg, April 28, 1841.   1f36

N. B.—A Steam Boat leaves Kingston going up, and Belleville going down the Bay, every morning, (Sundays excepted.)

the world. The 'Cobourg capitalists', as they were usually denominated in neighbouring Port Hope, tended to bite off considerably more than they could chew, and well over a million dollars disappeared in the Cobourg and Peterborough Railroad and other ventures that failed. But if their reach exceeded their grasp their initiative was certainly commendable, and a great deal of prosperity, as well as depressed times, arose from their activities. In 1832, two of 'the literary Stricklands'—Mrs. Susanna Moodie and Mrs. Catherine Traill—passed through Cobourg and found it a bustling place, so many immigrants arriving daily that accommodation at inns could hardly be obtained; but they were glad to find 'a select society' and 'many families of respectability'—that illusory something which was to become the *sine qua non* of the Victorian way of life.

The next thirty years was the heyday of Cobourg. The town had two newspapers,

one of which, the *Sentinel-Star*, has had 114 years of unbroken existence. Lovell's *Canada Directory* for 1857-58 gave the population as 'about 7,000', a figure Cobourg has never approached since. Its growth had been rapid. In June, 1837, the settlement had become an incorporated village governed by a Board of Police consisting of a President and four members. In 1850 it was incorporated as a town, with William Weller as first Mayor.

As there were then no railways, the roads were very important. Plank roads were tried and found wanting in the 'forties, and toll roads took their place, lasting down to the closing years of the Great War. The following broadside emanating from Port Hope was inspired by something more venomous than grim humour, for incendiaries actually burned the toll-house:

TENDERS WANTED
Tenders will be received until the 20th inst. for the construction of 100 Mud Scows to run between Cobourg

Old Victoria College, Cobourg. The College removed to Toronto in 1892.

and Port Hope on the Macadamized (?) Road connecting the two places, which is owned by Cobourg Capitalists. The Company feel that the new mode of conveyance is necessary, as the loss of horses, wagons, and valuable lives in the fathomless abyss of mud during court week was fearfully alarming. Until the completion of the said Mud Scows the Company will continue to exact toll from those who may be so fortunate as to escape alive through the gates. Though the legality of such exaction may be open to question, they confidently expect that in view of the public spirit of the Company in providing the Scows aforesaid the public will submit to be victimized. Dated at Cobourg this 15th day of March, 1859.

Simon Grumpy,
Sec. Road Co.

On December 29, 1854, a notable event occurred. This was the official opening of the Cobourg and Peterborough Railroad. A grand free excursion across Rice Lake on the three-mile trestle bridge and on to Peterborough regaled a thousand citizens. Fifty of the more prominent were entertained at dinner in Peterborough's Town Hall. Many and appropriate were the addresses delivered on this occasion, but that of William Weller, stage-coach proprietor, was undoubtedly the cleverest:

'I know,' he said, 'why you have called upon me—it is to hurt my feelings, for you know I get my living by running stages, and you are taking the BIT out of my mouth as well as out of my horses' mouths. You are comparing in your minds the present times with the past, when you had to carry a RAIL instead of riding one, in order to help my coaches out of the mud. But after all I am rejoiced to see old things done away and new things becoming WELLER.'

But the Rice Lake trestle bridge shortly gave way, the forces of nature, it is said, being aided by men hired by the rival railway from Port Hope who loosened the bolts as spring approached and the ice was about to crush against the structure. Hard times fell heavily on Cobourg. A traveller, John Mawe, describes the change in a letter to the press, comparing things in the late 'fifties with what he found in the early 'sixties. In the eighteen-fifties

'Everyone thought that Cobourg had a fair chance to vie with Hamilton and Toronto as a centre of industry. The building of the Grand Trunk Railway brought many families to town. It was a time of good pay and free expenditure. . . . Everybody would soon grow rich; eating, drinking, and pleasure were the order of the day. Lots of champagne to be had; sundry little parties every night somewhere; select balls at $5 a head for the upper ten were held with great éclat; and dollar hops for the mechanics.'

But in 1864—

'The G.T.R. must have let me off at the wrong place. . . . The harbour has no shipping; the lumber now goes via Port Hope. There is not much public spirit now; Cobourg looks dry and sleepy. Even the sidewalks cry out for repairs. One of the sidewalk planks sprang up and nearly killed a magistrate; all his own fault, say the townspeople—what business had he at the end of the board! Apathy is the order of the day. Inattention to public business suggests to strangers that the town has gone to the dogs.'

But the Woollen Mills resumed operations, and in the 'seventies the Crossen Car Works developed from the old Helm Foundry, so the depression came to an end. And if you like walking you can still travel over the old Cobourg and Peterborough Railway roadbed past Baltimore and on to Harwood on Rice Lake, and, as you enjoy the pastoral scenery, reflect upon Burns' words,

'The best-laid schemes o' mice and men
    Gang aft a-gley'.

Business card, Albion Hotel, in the 1840's

COBOURG, CANADA WEST.

ALBION HOTEL.

J. A. COWLES.

WHITE MUD PORTAGE, WINNIPEG RIVER

PAUL KANE*
Courtesy National Gallery of Canada

When we think of educational life in Cobourg we naturally recall Old Victoria, which was for half a century, before removal of the College to Toronto, so prominent in the cultural advancement of the district. But Cobourg has always been noted for the number of its inhabitants of intellectual and cultural taste and accomplishment. In or near the town once lived Paul Kane, noted artist, Archibald Lampman, prominent poet, and Gerald Hayward, world-famous painter of miniatures; while the early columns of the *Cobourg Star* contain the poetry of Rhoda Anne Page, Frederick Rubidge, and other early residents whose literary productions— still, unfortunately, unpublished—rank far higher than much that is in print. Consider this poem from the pen of Rhoda Page:

VOICES FROM THE WOODS

We talk of lifeless things, and creatures dumb,
Of stocks and stones, and voiceless flowers and trees;
To me there seems strange eloquence to come
    From every one of these.

One eve I wandered in the quiet wood,
The light leaves rustled in the summer gale,
Whose sighing through the forest solitude
    Went like a spirit's wail.

The tall oak reared his branches to the sky,
Lordly and proud—the stately and the strong—
The type of daring thoughts and actions high
    That live in memory long.

A woodland king he seemed—but near his side
Drooped gracefully a weeping willow tree;
That spake of strength and might and manhood's pride,
    This of humility.

For its green branches bent them to the sod,
And softly kissed the lowly daisy's face,
As if the humblest workmanship of God
    Were worthy an embrace.

The trembling aspen quivered in the breeze,
Wavering like weakness in temptation's breath;
But the still, solemn cypress grew by these,
   And preached unshaken Faith.

And the dark, sullen, sombre hemlock there,
Stood dull and cheerless as despondency;
But a sweet briar was blooming, fresh and fair,
    Hard by the gloomy tree.

And round his rugged trunk her branches twined,
All rich with scented leaves, and buds, and flowers,
Sweet as the gentle words and accents kind
    That brighten grief's dark hours.

Oh! many a voice from the sequester'd wood,
In the deep calm of a still summer even,
May whisper to the soul in thoughtful mood,
    Wisdom that comes from Heaven.

Free from such public amusements as motion pictures and radio, the citizens of the nineteenth century were much more resourceful in their diversions. The National

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*Paul Kane was an early resident of Cobourg, where he specialized in portraits.
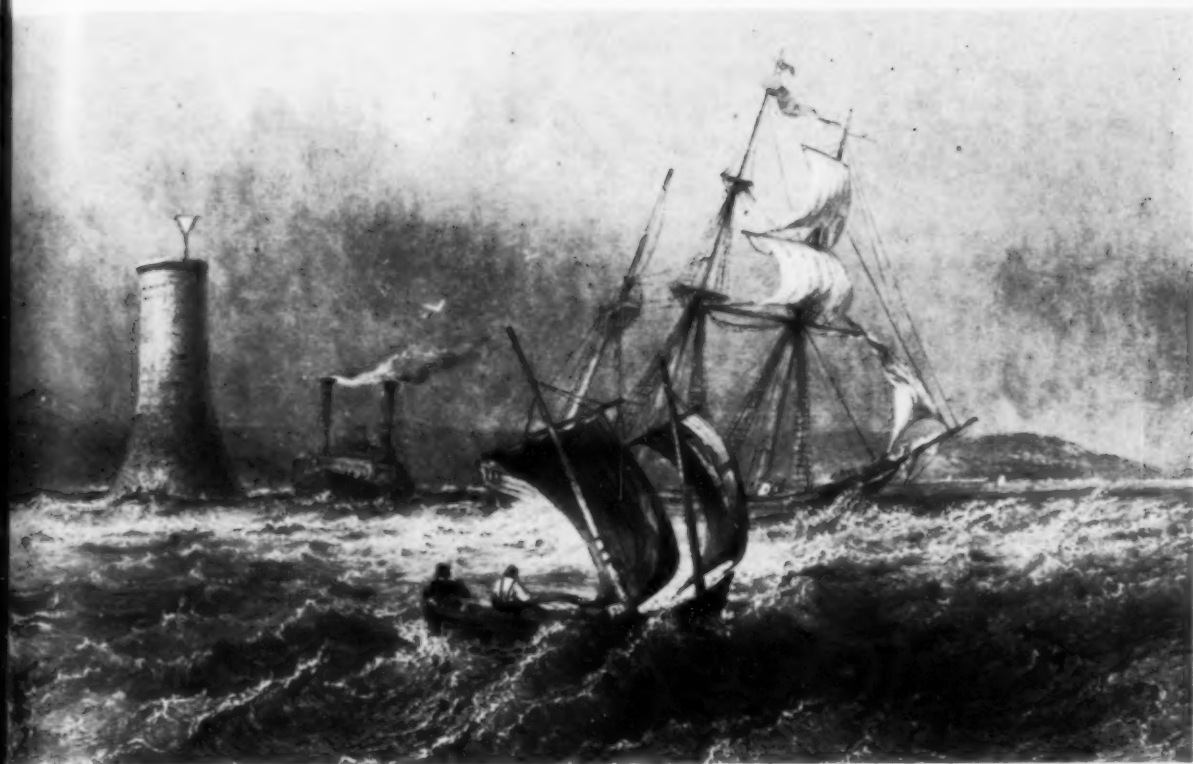
THE LIGHT TOWER, BETWEEN COBOURG AND PORT HOPE, 1840

W. H. BARTLETT
Reproduced from Canadian Scenery, *by N. P. Willis*

Societies of St. George, St. Patrick, and St. Andrew were then strong forces in town life. Forty toasts were frequently proposed at their anniversary banquets, and those who were not long since under the table made their way homeward as the sun rose. The volunteer Fire Brigade of Cobourg was also, for sixty years, a great force in community and social life. From time to time—as elsewhere—incendiary fires occurred, and not infrequently were the members charged with setting them to provide a race for the various companies and their hand-drawn machines. The Firemen's Parade and Grand Ball were for many the events of the year, and public enthusiasm was equalled only by the pride of the members. 'When the old Brigade came to an end half a century ago,' said Fred W. Beebe to the writer, 'I left Cobourg. The old town could never again be the same to me, and I went to seek my living elsewhere.'

There were, too, the Mechanics' Institute, forerunner of our public libraries, the Temperance Society to apply the brakes to immoderate drinking, and Agricultural and Horticultural Societies holding fairs and exhibitions. In the eighteen-forties the Cobourg cricketers played a match with the Hamilton club. Three days were needed, one to make the journey by steamship, one for the match, and one to return home. Later, baseball, curling, lawn bowling, and hockey tended to replace the old English game, and Cobourgers ranked high in championship play in all these sports.

Though Cobourg never suffers so seriously from floods as does neighbouring Port Hope from the overflowing of the Ganaraska, yet there have been instances of considerable damage. In May, 1864, occurred the most disastrous flood of the Factory Creek, on which there were then six or seven mill-ponds compared with one now. When the banks of the largest gave way, trees, fences, bridges, and huge rocks were hurled with astonishing velocity towards the lake. For miles along the lake shore were great quantities of floating timber; while the flooded region was a scene of unparalleled devastation. Three lives were lost, and many thousands of dollars' damage was done to the property of those who had the misfortune to live in the path of the flood—
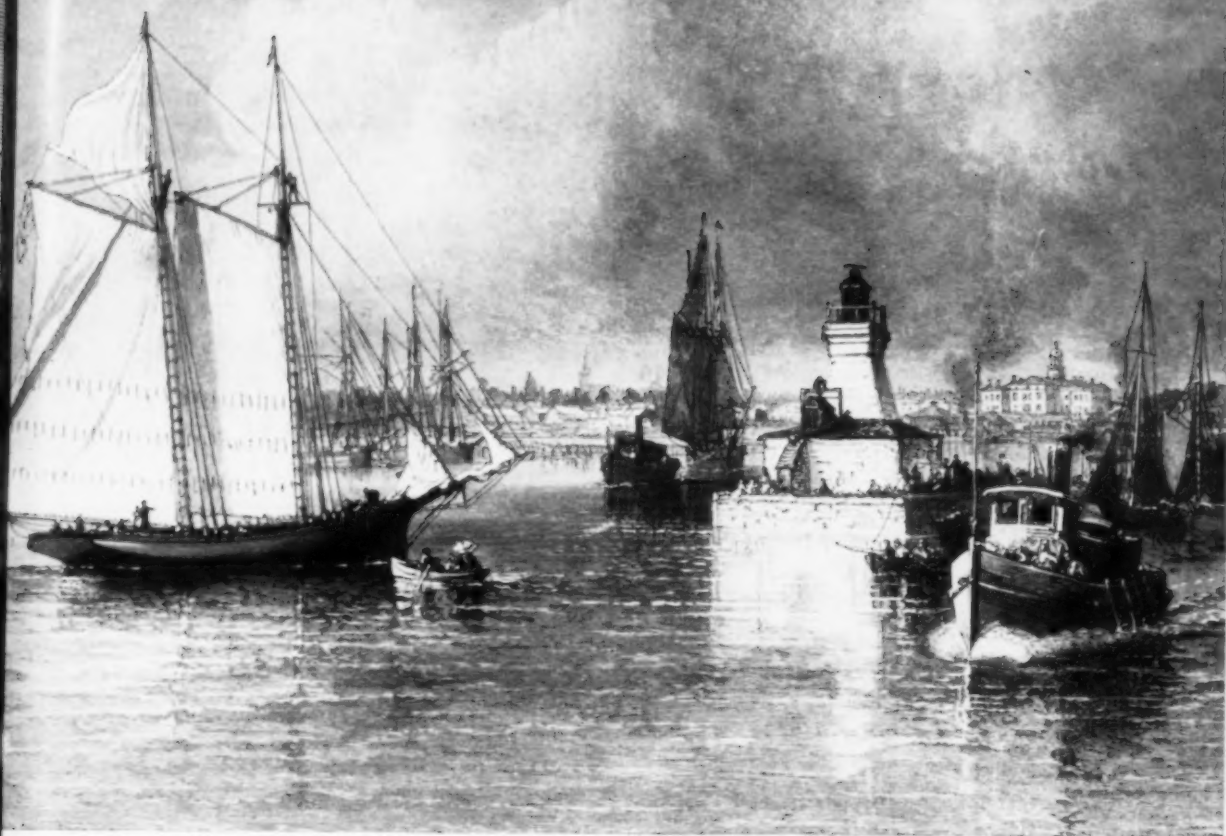
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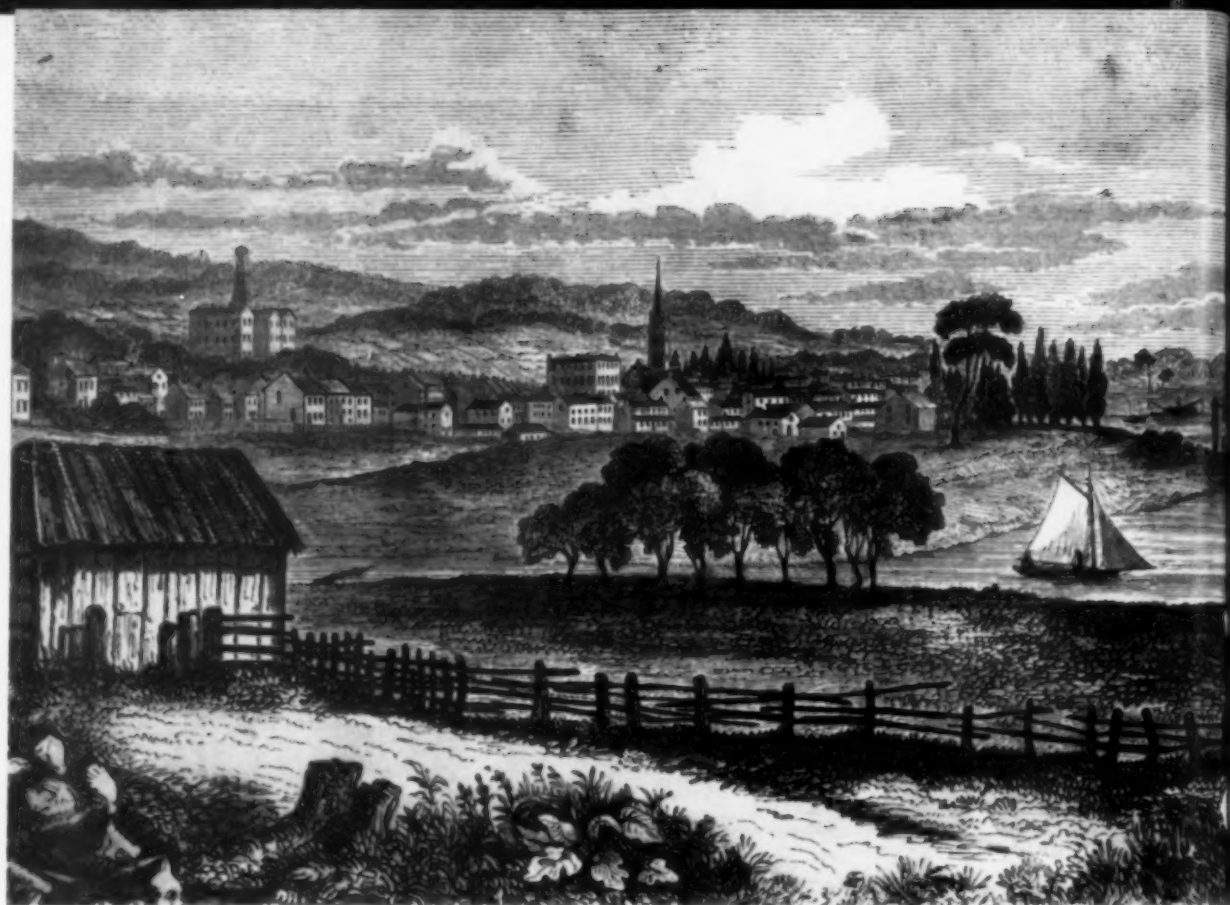
COBOURG IN 1853 FROM WELLER'S HILL
The Factory Creek empties into the lake to the west of the town.

fortunately on the outskirts of the town, not in its centre. Just a few weeks earlier, on April 9th, the Globe Hotel, reputed the best hostelry between Toronto and Montreal, had been destroyed by fire, so the townspeople considered that they had more than their share of disaster that year.

The founders of the town included so many men of high intelligence and integrity that it is almost invidious to name a few. Ebenezer Perry, Andrew Jeffrey, George Ham, W. S. Conger, and William Weller formed, in 1837, the first Board of Police (the municipal council of the time), but many others were prominent in the town's development before and afterwards. Asa and Zaccheus Burnham, Walter Riddell, D'Arcy Boulton, J. H. Dumble, Dr. John Beatty, George Guillet, M.P., Colonel Vance Graveley, Senator William Kerr, C. C. Field, M.L.A., Sam Clarke, M.L.A., and C. C. James must be mentioned for their varied and important contributions to Cobourg and the country generally.

Many famous people once lived in Cobourg. Sir John Macdonald and Chief Justice Draper studied in Cobourg law offices, as did Mr. Justice W. R. Riddell and Judge E. C. S. Huyeke. Among notable names in the entertainment world are Katherine Cornell, Marie Dressler, and Beatrice Lillie, all of them intimately connected with Cobourg. Nor should Nancy Crawford (née McCarthy), Cobourg's benefactress, be omitted in any reference to the town's greats. In her will she left generous bequests to religious and educational organizations and set aside a large fund for the benefit of the poor of the town.

Old Victoria College, now the Ontario Hospital, always stands out in pictures of Cobourg, both architecturally and from its lofty situation. Among Cobourg's other notable buildings is Victoria Hall, the municipal building, erected 1856-1860 when it was thought that Cobourg would shortly be a city. Planned by Kivas Tully, famed Toronto architect, built by the Burnets,

COBOURG HARBOUR IN THE 1870's

Reproduced from Picturesque Canada *by G. M. Grant*

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COBOURG IN 1840

W. H. BARTLETT

Reproduced from Canadian Scenery

grandfather and great-uncle of the present (1944) Mayor, and officially opened by the Prince of Wales (Edward VII) during his visit to Canada in 1860, the building is among the best of Canadian town halls. Unfortunately, however, the bond issue by which its cost was paid was only recently discharged.

With a royal name, Cobourg was frequently visited by royalty. The most notable, of course, was when the Prince of Wales came and danced with the belles of the district in 1860, remaining over night (if any was left of it) at the old home of the Honourable Sidney Smith, to the west of the town. Belleville and Kingston were omitted from the Prince's itinerary because their Orange Lodges were too aggressive to suit the Royal secretary, the Duke of Newcastle, a Roman Catholic; while in Toronto the Royal party neatly avoided passing under the Orangemen's Arch. In Cobourg a party of Native Canadians, wearing large silver maple leaves, drew the Prince's carriage to Victoria Hall, where Mayor Beatty and other dignitaries presented their addresses.

In 1879, the Governor-General, the Marquis of Lorne, accompanied by the Princess Louise, paid Cobourg a visit. A guard of honour under Colonel J. Vance Graveley aided in their reception, and Major George Guillet, the Mayor, welcomed the vice-regal visitors. In the custom of the times the National Societies were prominent in the reception, as were also the various fraternal organizations, the Fire Brigade, and other social and educational societies. More recent visits of celebrities have perhaps lacked some of the dignity that was so characteristic of earlier times.

In 1848, and again in 1855, the Provincial Exhibition, forerunner of the Canadian National Exhibition, was held in Cobourg. Frequently the Governor-General attended these agricultural and industrial fairs, which were held only in a few of the chief cities and towns. In Cobourg the fairground was located in the west end of the town, beside the large millpond north of the Ontario Woollen Mills. A ploughing match was also

held, and after the grand dinner that concluded the show the gentlemen of Cobourg held steeplechase races—in which, of course, they themselves rode.

The greatest crowd came to Cobourg, in 1859, to see the execution of Dr. William Henry King of Brighton for wife-poisoning. The scene was the old Court House (now the Home for the Aged) to the northwest of the town, in the old settlement long called Amherst. Ten thousand spectators, including a tribe of Indians, came from all directions and crowded into points of vantage. The event was highly satisfactory to all concerned, for even Methodist Victoria College closed for the day, the doctor rose to the occasion with a typically Victorian address from the scaffold, a woman or two fainted in the crush, every one was satisfied that justice had been done, and the hangman's rope was cut up for souvenirs (the writer was bequeathed a piece!). The other great legal battle in Cobourg was the far-famed libel suit of Sir Arthur Currie *versus* Preston and Wilson, in 1928, when Canada's wartime Commander vindicated his good name in the face of charges relating to the Battle of Mons which closed the Great War.

In early Cobourg the industries were, in general, small but very numerous. A flour mill or a sawmill was frequently the nucleus of pioneer settlements, and a distillery was often operated as an adjunct to the grist mill. Besides these, early Cobourg had foundries and machine shops, coopers and tanners, brickworks and cabinet shops, saddlers and harness-makers, and shoemakers who really made shoes. There were two marble factories (presumably cutting tombstones), a carriage-maker, two chandlers or candlemakers, a soapmaker who used wood ashes for his potash, a ropemaker, three brewers, and numerous shipwrights and builders, carpenters, tinsmiths, plasterers, blacksmiths, and painters.

The modern industries of the town are steady rather than spectacular. The hundred-year-old Woollen Mills near the mouth of the Factory Creek has been converted into the Cooey Machine & Arms Company. Once a distillery, the old factory buildings on

William Street have long manufactured matting and carpets. The old Model School on University Avenue (which the writer once attended) is now the Lydia Pinkham Medicine Company; while the old Steel Plant on Ontario Street has been converted into Douglas-Pectin Limited. The Cobourg Dyeing Company, Canadian Canners Limited, Donald McKinnon & Sons, Edwards & Edwards Limited, the Bird-Archer Company, and the Dominion Wheel and Foundries Limited comprise the chief other industries of Cobourg. For nearly forty years the two great car ferries running winter and summer from Cobourg to Charlotte, port of Rochester, have given to the harbour something of the appearance of an ocean port, and when the St. Lawrence development is completed it will be one.

Nearly half a century ago Cobourg began to be the Mecca of American aristocrats and financiers in search of a place to spend the summer and some of their wealth. Palatial homes were erected on elaborate estates in the suburbs, and Civil War generals and Pittsburgh steel magnates hobnobbed with such Canadian visitors as could keep up the pace. The Cobourg Horse Show, supported by these summer visitors, became world-famous just prior to the Great War, and hotels like the Arlington and the Columbian provided a gay and cosmopolitan rendezvous. But times change, as well as tastes, and what remained of the great summer residences largely passed into disuse during the Great Depression of the early nineteen-thirties.

Always a very loyal town, Cobourg has supported the war effort of the second World War as it did the first—and the wars, rebellions, and Fenian scares of the past. Perhaps the spirit of old Cobourg is best exemplified by a story told about 'Squire' George Daintry, Mayor in 1864-1865 and prototype of 'the fine old English gentleman' in the well-known song. At the time of the Fenian raids in '66 the townspeople were aroused by the rumour that Irish invaders had set sail and were crossing the lake to attack Cobourg. Squire Daintry was so incensed that he took down his old fowling-piece from the wall and marched to the harbour, hoping to have first shot at the invaders. Much to his disgust, none arrived, but on the way home he shot a stray pig and felt much better!

LT. PHILIP BAINBRIGGE
Courtesy Public Archives of Canada

COBOURG IN 1840
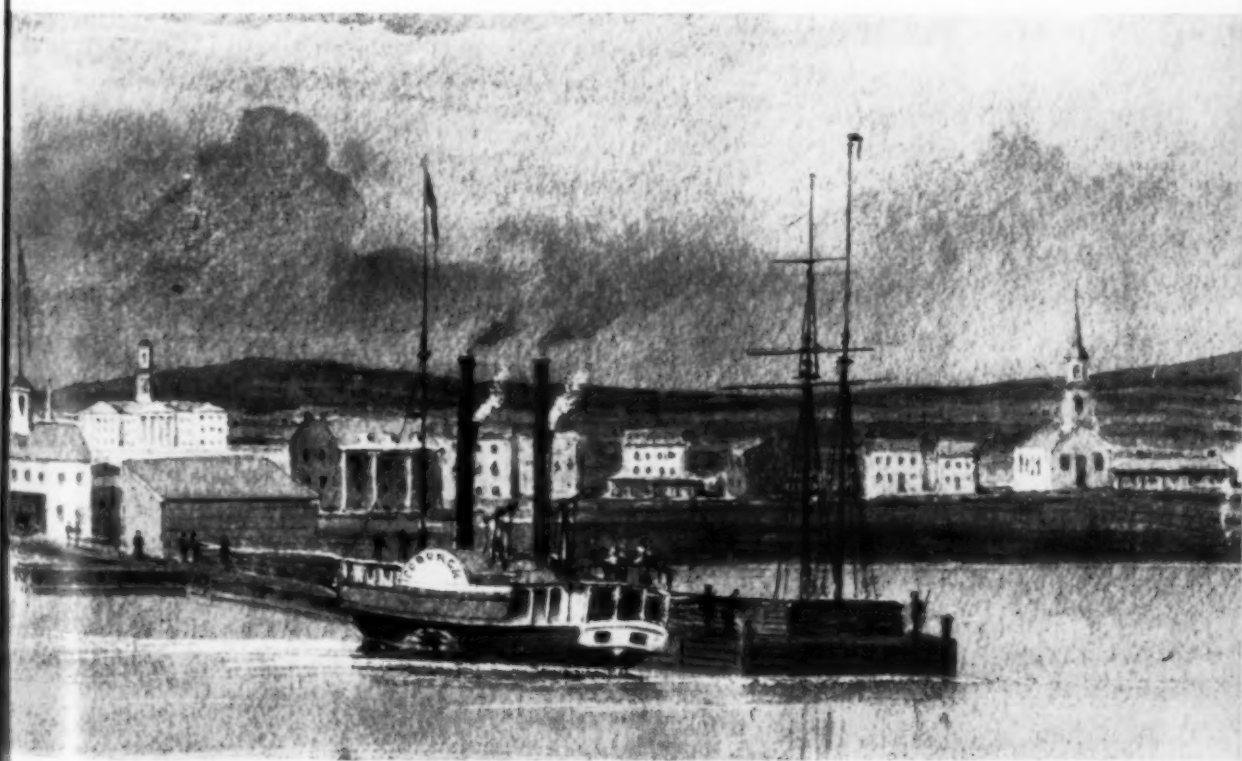
Above:—The Cobourg
harbour is the only
year-round open port
on the northern shore
of Lake Ontario. Two
large C.N.R. ferries,
with first-class ac-
commodation for the
public, ply be-
tween Cobourg and
Rochester, N.Y.

Cobourg citizens
pride themselves on
the character of their
residences, most of
which are located on
large lots and well
maintained by their
owners. To many
thousands of travel-
lers on Highway No.
2 this luxurious Amer-
ican summer home
(one of many), sur-
rounded by extensive
and attractive
grounds, presents a
familiar and pleasing
landmark.

Sponsors of World Exploration

By G. R. CRONE*

BRITAIN'S ROYAL GEOGRAPHICAL Society was founded in 1830; its origins, however, may be traced back at least to 1788. Its immediate forerunner was the Raleigh Dining Club which served as an informal meeting place for travellers. At that time there was a widespread interest in exploration following the check caused by the Napoleonic wars, and linked with the expansion of the western nations.

This led to the co-operation of members of the Raleigh Club and other geographers in the foundation of the Society on a broad basis. Four hundred members joined in the first year, and, in the following year, it absorbed the African Association, founded by Sir Joseph Banks in 1788. Among those active in its establishment was Sir Roderick Murchison, distinguished for his geological work in Russia, and later President for sixteen years.

After being housed in various quarters of London, the Society was established at 1 Savile Row for many years (1871-1913), but its growth required larger quarters, and the present house in Kensington Gore was purchased in 1912. Through the generosity of its supporters, the Society was able to mark its centenary in 1930 by considerable additions to the house, giving it for the first time its own lecture hall, to hold nine hundred persons, and better accommodation for the library and map room. At the outbreak of World War II there were approximately six thousand members.

Library of 80,000 Volumes

The library now contains about eighty thousand volumes, including early narratives of travel and the reports of later exploration, books on survey, geographical science and related subjects, and the periodical publications of the geographical societies of the world. An extensive subject catalogue of all additions to the library is maintained for the use of students. The map collection includes the maps issued by nearly all the national surveys throughout the world—a total of over a quarter of a million maps in sheets. It is especially rich in early atlases, and has a large collection of photographs and lantern slides. The map room is open to the public, and the library deals with many requests for information both from members and from the public.

The objects of the Society were clearly defined from the first: the diffusion of geographical knowledge; the formation of a library and map collection; assistance and advice to travellers, and the maintenance of relations with similar bodies at home and abroad. For the first half century its energies were directed almost exclusively to the promotion and encouragement of exploration.

This period coincided with the great age of African exploration, and, as befitted the successor of the African Association, the Society was especially active in that continent. It organized—or was particularly identified with—Dr. Livingstone's expeditions of 1858 and 1866, the Livingstone relief expedition (1873-6), under V. L. Cameron, which explored the Congo basin, and the two journeys of Joseph Thomson in eastern and central Africa, 1879 and 1882.

Support was also given to H. Stanley's Emin Pasha relief expedition, which marked the close of the classical era of African exploration. Despite this preoccupation with Africa, the other continents were not neglected; one of the earliest and most successful travellers who received support was Sir Richard Schomburgk, the explorer of British Guiana. In the main, however, the Society's share was to advise travellers, to lend instruments, and to bestow recognition on outstanding work.

Arctic Saga of Capt. Scott

After the great African journeys, the interests of the Society, largely through the influence of Sir Clements Markham, were

directed to the Antarctic, and as a result British scientific work in that region was revived at the close of the century and has since continued with few breaks. In co-operation with the Royal Society, and with the support of the government, the British national Antarctic expedition was organized in 1901. Under the command of Capt. R. F. Scott the expedition achieved much success, exploring large areas of the polar plateau, and returning with valuable scientific observations. This work was continued by Scott's later expedition on which he and his companions died on the return from the South Pole.

In the twenty years from 1919 to 1939 the character of exploration changed to some degree: spectacular journeys through previously unexplored territory tended to give place to more intensive study of little known areas by teams of scientists. There remains, however, particularly in the polar regions, much exploration to be carried out.

Two notable polar expeditions were supported by the Society. The British Arctic air route expedition, 1930-31, from its base in East Greenland, besides much exploratory work, obtained information on flying conditions in the Arctic and on the meteorology of the ice cap, and perfected new developments in the technique of Arctic travel. The British Graham Land expedition, 1934-7, composed largely of members of the Greenland party, and profiting from its experiences, did much to extend knowledge of that area of the Antarctic, discovering and mapping King George VI Sound, and disproving the existence of Stefansson Strait.

Most public attention has perhaps been attracted to the several Mount Everest expeditions, organized in partnership with the Alpine Club. The first expedition explored the northern approaches to the mountain and found the route which has been used by all later expeditions, and successive parties have climbed to some 300 metres of the summit. These expeditions have trained many men in exploratory mountaineering and have resulted in much scientific knowledge of the area and in valuable observations on physiological reactions to extreme altitudes.

The Karakoram Range has also been the scene of several expeditions, including that led by Lt.-Col. Kenneth Mason in 1926, when photogrammetric methods of survey were employed, and of later expeditions led by E. E. Shipton. Mention must also be made of the numerous expeditions to the Libyan desert conducted by members of the Society, which resulted not only in valuable topographical knowledge, but in the evolution of methods of desert travel later used successfully during the war.

Explorers from Oxford and Cambridge

The other type of expedition has largely been organized by younger members of the universities, a development marked by the foundation of the Oxford University Exploration Club in 1927. The Society has assisted these by advice in the preparation of their plans and on equipment, by financial grants and loan of instruments, and by the publication of their geographical results and maps. Among the expeditions organized by the O.U.E.C. may be mentioned those to Spitsbergen and North East Land, West Greenland, British Guiana, the New Hebrides and Borneo. Similar work has been done by Cambridge men in the Canadian Arctic, East Greenland, the Great Barrier Reef of Australia, and the West Indies.

In normal times the Society provides instruction in field survey for travellers, and assists with the compilation of their observations on their return. It is also able to put them in touch with experienced travellers in the area in which they propose to work. The Society's publication, *Hints to Travellers* (11th ed. 2 vols. 1935, 1938), largely embodies this collective experience.

Thus, though the Society has not recently undertaken direct responsibility for particular expeditions, it lends its support to those whose plans it has approved, and this approval is often instrumental in obtaining further support. Finally, the two gold medals, given annually by His Majesty King George VI, on the recommendation of the Society, confer recognition of outstanding work and serve as encouragement to further effort.

The geographical results of the expeditions mentioned, and of many others, are published in the *Geographical Journal*. This also includes papers on technical subjects read at meetings of the Society, reviews of new publications, and notes on current geographical work. The publications also include a technical series, and reproductions of maps and charts of historical interest.

The Society has always been concerned in advancing British cartography by maintaining a high standard of draughtsmanship and lettering and by employing modern methods of reproduction for the maps accompanying papers in the *Geographical Journal*, and special maps published from time to time. The map of Europe and the Middle East recently prepared for the British Council embodies several developments in this field. The advice of the Society is at the disposal of official departments when requested, and has been formally submitted, e.g., as evidence to a committee considering the future of the Ordnance Survey.

Raising Level of Geographical Education

Similarly, the Society has contributed much to raise the level of geographical education and to secure the recognition of geog-

raphy as an independent discipline at the universities. Its initiative resulted in the foundation of Schools of Geography at Oxford in 1899 and at Cambridge in 1903.

During the war the work of the Society has naturally been curtailed in some directions, but, despite damage to the house by enemy action, its main features have been maintained. Many members have been able to apply their geographical experience and training in the national interest. The library and map collection has been constantly used by service and other government departments and by representatives of the Allied nations. At the Society's meetings, subjects concerning post-war planning have been discussed from the geographical aspect.

The basis of the Society's work thus lies in the association of those directly qualified for exploration, travel, and research with the general body of members who are interested in the geographical background of countries and peoples, and who by the support of the Society enable it to advance geographical knowledge. The Society can thus act as the recognized representative of all British geographers, serve as a repository of experience and information, and encourage adequate standards in the science.

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EDITOR'S NOTE-BOOK

Griffith Taylor, D.Sc., B.E. (Mining), B.A. (Research, Cambridge), has been a Fellow and Director of the Society for almost ten years. A native of Australia, he was educated at the Universities of Sydney and Cambridge, and for eight years engaged in scientific research with the Commonwealth Meteorological Service. A world authority in the field of geography, Dr. Taylor has to his credit twenty years of intimate first-hand study of European geography, has studied environment in all seven continents, and spent two years in the Antarctic as senior geologist with Capt. Scott's expedition. From 1920 to 1928 he directed the first department of geography in an Australian university, and in 1935 he left the University of Chicago, where he was then a professor of geography, to occupy the first chair of geography in

Canada—at the University of Toronto, whose Department of Geography he has headed ever since. Dr. Taylor holds office in many scientific societies, and was the first geographer not residing in the United States to be elected President of the Association of American Geographers. He is the author of some twenty books and over a hundred articles dealing with environment control, ethnology, history and meteorology. (See also C. G. J. for June, 1944; September, 1941; May, 1941; June, 1940; January, 1940; May, 1937; and March, 1936.)

* * *

Jon Farrell, whose article, "History in the Taking", appears in this issue, was born in Medicine Hat, Alberta, and received his primary education in California and Alberta schools before attending the Universities of

Alberta and Toronto. For fifteen years prior to enlistment he was active in journalism, radio and theatrical endeavours in Canada, the United States and England. Proceeding overseas in September, 1943, he landed in Normandy on D-Day as a private in Intelligence of an infantry unit, and is presently attached to Canadian Military Headquarters in London with Public Relations. While gathering material for his article, he visited the Western Front with Canadian Film and Photo Units.

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Edwin C. Guillet—See C. G. J. for May, 1944.

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AMONGST THE NEW BOOKS

The Transplanted by FREDERICK NIVEN

(Wm. Collins Sons and Company, Canada, Ltd., Toronto, $2.75)

PERHAPS no other writer has so fully caught the romance of the opening-up and early settlement of Western Canada, and given expression to it in such an interesting way as has Frederick Niven. An earlier novel, *Flying Years*, is a fascinating account of the plains region from Fort Garry to Rocky Mountain House, a saga of some sixty years, coming down to the time of the first World War, packed with history, romance, local colour, and a sympathetic understanding of the country and its people. Another of his books, *Mine Inheritance*, goes back to an earlier period, centring around the coming of the Selkirk settlers to Red River and the stormy events that followed. The present volume, *The Transplanted*, is a third tale of Canadian pioneer life, taking us this time into the mountains and valleys of British Columbia. Unfortunately, there will be no further additions to the series, for Niven died early in 1944.

Like the heroes in all three of the above-mentioned stories, Niven came from Scotland. Arriving first in the spring of 1899, he was attracted to British Columbia, worked and wandered through much of it, and came to know it intimately. During most of his time in the province, his headquarters were at or near the town of Nelson on Kootenay Lake, and it is there, on a mountain-side above Cottonwood Creek, that he lies buried.

The hero of *The Transplanted*, Robert Wallace, whose youthful imagination had been stirred by the reading of the adventures of Alexander Mackenzie, David Thompson, Simon Fraser, and other great explorers of the Canadian West, might well have been Niven himself. Wallace became a mining engineer, and it is his journey to make a report on a mineral prospect on "Elkhorn" Creek that marks the real beginning of the present story. His own romance, his friendship with John Galbraith, another Scotchman, and the latter's love for Marion Masters, a young woman with a past, are some of the highlights of the book. Back of all, however, is the country itself, which Wallace loved; to him the development of its resources—mineral, forest and agricultural—was a continued challenge. To those who know the western mountains, this geographic setting is perhaps the most attractive features of the volume. —F.J.A.

Peggy's Cove by J. F. B. LIVESAY
(The Ryerson Press, Toronto, $2.50)

THE late Mr. Livesay was among those fortunate souls who were privileged to spend some part of their leisure at Peggy's Cove, that beauty spot on Nova Scotia's Atlantic Coast. The present slender volume is a collection of sketches by Mr. Livesay of Peggy's Cove and the stiff and salty people who win their hard livelihood in its coastwise fisheries. Mr. Livesay wrote with the insight and sympathy which could only have come from a deep love and understanding of the village and its people. His skilful pen will, to use the proper eastern phrase, "make us acquainted" with those friends of his in this coastal backwater, and we shall be the richer in knowing them through his friendly eyes. This book is beautifully illustrated with photographs by the author. One of those better books that the reviewer can recommend in the highest terms.

* * *

Japan, a Physical, Cultural and Regional Geography
by GLENN THOMAS TREWARTHA
(University of Wisconsin Press, $5.00)

PROFESSOR Trewartha is well known as a writer on geographical subjects. Among his earlier books, *A Reconnaissance Geography of Japan*, published some ten or twelve years ago, has proved to be so valuable for military purposes that the need for a more modern and enlarged version became apparent. The present book is designed to meet not only the military requirements of the day but also those of the student, the professional geographer and the general reader. A layman can scarcely be considered a competent judge of the book's value for specialized purposes, but its merit as a geography and handbook of Japan for general use is beyond question.

In arrangement the book follows the pattern usual in modern geographies. The first section covers the physical aspects of the Archipelago and its resources; the second section, its population and culture, its settlements and buildings, and its industry, commerce and communications; while a third section is devoted to a study of regional subdivisions individually. The book is illustrated with nearly three hundred diagrams and photographs, and much of the statistical information is conveniently tabulated. There are two excellent maps showing relief and distribution of population and an inclusive index. Regrettably enough a good general topographical map of the whole country has not been included.

The framework of the book as briefly outlined above is enhanced by the author's lucid and concise style and the admirable arrangement and selection of material which is in evidence throughout the book. Now that the war in the west has drawn to a victorious close, we, in Canada, have a greater concern with our eastern adversary, and the present book is heartily recommended to those who would study her economy and know her strength and her weakness.

British Survey Handbooks
(1) BELGIUM (2) RUMANIA

(Cambridge University Press, Macmillans, $5.00

Two small handbooks on Belgium and Rumania designed to give the reader some insight into the probable post-war conditions and politics of these countries. Written, of course, before these countries were liberated, they have foretold events up to this time of writing with remarkable foresight, and will be equally valuable in estimating the course of future events. They give an excellent background of the history, economic status and political aspirations of these countries in a summarized form that is really a masterpiece of condensation. Admirably designed and written with skill and wide knowledge. Recommended reading.

* * *

Black Widow by THORP AND WOODSON
(University of North Carolina Press, $3.00)

AN account of America's most poisonous spider whose reputation for deadliness is such that its name has been given to one of the latest types of night-fighter aircraft. This spider, *latrodectus mactans*, is found throughout the whole of the United States and more rarely in some of the provinces of Canada. Its bite is extremely painful and at times fatal, and each year adds to its list of victims, particularly in southern and southwestern states. This interesting insect, if it is an insect, prefers for its habitat the shade of old buildings or piles of rubbish and appears to be particularly addicted to spinning its webb in those types of outdoor plumbing so admirably described by Mr. Chick Sale some years ago. The Black Widow can scarcely be considered a major menace in this country, but one will be well advised to avoid too close contact with large, wiry legged spiders whose bodies are shiny black similar to a shoe button or the head of a hat pin, though, in the present age, the memory of shoe buttons or hat pins may be all but lost in our land.

*See "Black Widow: the World's most dangerous Spider", C. G. J., Feb., 1944.

* * *

Birds of the Southwest Pacific by ERNEST MAYS
(The Macmillan Co., New York, $4.75)

A HANDBOOK of the birds of the Southwest Pacific with end maps, three colour plates and numerous line drawings. It is a book for the bird lover or professional ornithologist.

* * *

Brazil, Giant to the South by ALICE ROGERS HAGER
(The Macmillan Co., $2.25)

THIS is a pleasantly written account of Brazil of about the length and in the general style of a feature article. It is illustrated with hundreds of excellent photographs which amplify the text in such a way that they form an integral part of the book.

P. E. P.

XII

Westward from Vinland by HJALMAR R. HOLAND
(Duell, Sloan, and Pierce, New York, $4.00)

IT long has been accepted that Norse seamen crossed the Atlantic and visited parts of the coasts of North America sometime about the year 1,000 A.D. Accounts of these voyages have been preserved in Icelandic sagas, and the only points in dispute have been the exact localities so visited. In 1898, a stone, strangely engraved in what might be runic characters, was found by a farmer while clearing land, near Kensington, Minnesota, indicating that the voyaging Norsemen might have penetrated the interior of the continent. This stone was at first discredited as a forgery, but the discovery of medieval weapons of European origin in the same locality has led to general acceptance of the fact that the central part of the North American continent was reached by Norsemen sometime during the Middle Ages.

Mr. Holand, who is of Norse descent, became possessed of the Kensington stone some years after its discovery and has devoted much effort to deciphering the inscription and to the verification of the various relics of the Norsemen in the middle west. The present book covers the whole subject of Norse voyaging to America in so far as it has been laid bare by recent researches, and, when fact and record are absent, Mr. Holand's long study of the subject has made it possible for him to supply a plausible connection between a Norse expedition into America and the known facts of European history.

It goes without saying that Mr. Holand is an enthusiast in his subject and about his race, and the book would be better if it were written more objectively. His enthusiasm for what he terms mooring stones—boulders beside Minnesota lakes with holes drilled in them—seems greater than any evidence connecting them with his subject would warrant, and as far as one can see, there is no factual basis for his belief that these wandering Norsemen entered America through Hudson Bay. They could as well have come up through the Great Lakes or even by way of the Mississippi. When Mr. Holand refers, on page 30, to Scandinavian participation in the conquest of North America or to a book *printed* in the thirteenth century, he materially weakens one's belief in the soundness of his work.

The whole subject is, of course, of only academic interest. The Norse visitors to our coasts left no permanent settlement, they came and departed, even as did the Norse pirates who raided the coasts of Europe for centuries. The picture, however, of a little band of these warriors pulling their boats up our rivers, and crossing our lakes in the heart of the continent, harassed by Indian attacks and perhaps dying in some savage massacre or, as Mr. Holand suggests, being incorporated into some Indian tribe, is a fascinating one, and we may hope that some day further records may be found that lift the curtain of time from this, the ultimate saga of the Norsemen in the west.

Canadian Government and Politics by H. McD. CLOKIE
(Longmans, Green & Co., Toronto, $3.00)

WHEN, nearly eighty years ago, four Canadian provinces combined to form the Dominion of Canada, they were not conscientiously creating a new form of colonial government or a new conception of empire. The Dominion of Canada was still a colony and her development to national status within the Empire has been a matter of slow evolution with little or no statutory authority. In law, she has no constitution other than an act of the British Parliament—The British North America Act, which is so often referred to and which so few of this generation have read. Legally, any change in her status will require a further act of the British Parliament, though, as far as the layman can see, nothing very much would happen if she decided to go ahead on a constitution of her own, without reference to any one. Be that as it may, her growth to nationhood under the aegis of an obsolete colonial statute makes a study of her governments of peculiar interest, especially at the present time.

Pedantically approached, descriptions of governments and their powers would make very dull reading indeed, but Professor Clokie is able to convey to his readers his own keen interest in the subject and his sense of its importance. He describes our various governments, federal, provincial and municipal, traces their origin and development and discusses the jurisdictional no man's land of Dominion-Provincial relations. Much has been written about various phases of this subject, but the present book covers the whole wide field in a concise but comprehensive and popular form which will appeal both to the student and to the general reader. It is another of those excellent studies of Canadian affairs which have appeared within the last few years from various sources and which are doing so much to make the ordinary citizen familiar with his country, its resources and economics and the problems it will face in the future.

There is a useful bibliography for each chapter, an index, and an appendix giving the text of the British North America Act and related statutes.

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British Woodland Trees by H. L. ELDON, B.T.
(Batsford Limited, London, 12/6)

A WELL written and interesting description of the woodland trees of Britain, both native and imported, their culture and uses, and the properties of the timber they produce. The book is beautifully illustrated with photographs and cuts, and, while it is evidently designed more for the use of the professional forester or silviculturist, it is written in non-technical language and should interest and please the general reader.

P.E.P.